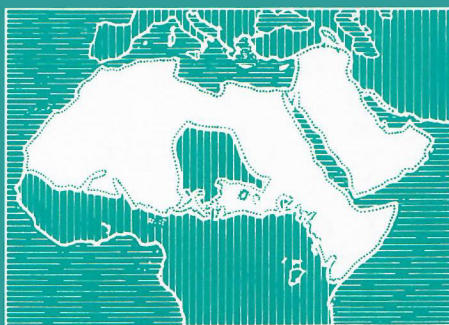


# JOURNAL OF AFROASIATIC LANGUAGES



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CHRISTOPHER EHRET

THE ORIGIN OF THIRD  
CONSONANTS IN SEMITIC ROOTS:  
AN INTERNAL RECONSTRUCTION  
(APPLIED TO ARABIC)

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M. LIONEL BENDER

GENDER IN OMOTIC

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# THE ORIGIN OF THIRD CONSONANTS IN SEMITIC ROOTS: AN INTERNAL RECONSTRUCTION (APPLIED TO ARABIC)

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## I

### The Problem of Semitic Trilaterals

The problem of the origins of the Semitic trilateral root structure is an old issue in comparative Afroasiatic studies. The proportion of seemingly irreducible triconsonantal roots in Semitic is a pattern unparalleled among the world's languages, and for that reason alone the trilaterals are suspect as morphologically extended forms of once-simpler roots.

Similar triconsonantal roots occur less pervasively in other branches of Afroasiatic, most notably in Berber and Egyptian and to a lesser extent in Cushitic, Chadic, and Omotic. For Cushitic, in historical-comparative terms the best known of the branches other than Semitic, third consonants can often be shown either comparatively or synchronically to derive from nominalizing suffixes or verb extensions. These suffixes include the Proto-Cushitic noun and modifier formatives in *\*m*, *\*n*, *\*l*, *\*r*, *\*y*, and *\*w* and the verb extensions *\*m* intransitive—variously producing Agaw *\*η* reciprocal, Eastern Cushitic *\*m* 'passive,' and Southern Cushitic *\*m* 'stative'—*\*s* causative, *\*t* extended action, and *\*w* and *\*y* inchoative/denominative (Ehret 1980, 1988). A further verb suffix reconstructible as PC *\*dʔ* appears in the often still productive Eastern Cushitic *\*d* "middle" extension and apparently as a no longer productive stem-final element *\*d* in Agaw verb roots. It probably most often had an autobenefactive or attributive implication. Still another verb extension, *\*n*, apparently giving open-endedness to an action, can be seen in fossil occurrences in Agaw. An additional no longer productive suffix, *\*b*, probably originally an animate deverbative, can be comparatively reconstructed for the pre-Proto-Cushitic eras. It occurs widely as the third consonant in Cushitic roots

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for parts of the body, the most striking internally decipherable case being that of the Proto-Cushitic root pair \*gʷ-f- 'to swallow' and \*gʷaʃb- 'throat' (Ehret 1987).

These suffixes accounted for, there still remains, however, a persistent residue of 10 percent or more of the PC roots in which the third consonants resist easy explanation. The available corpus of such PC roots is too small as yet to identify with any confidence the common semantic theme of groupings of roots with the same third consonant; also as yet very few are the number of pairings between bi- and triconsonantal roots that are semantically relatable and that differ only in the latter member's possession of an additional, third consonant. The example of PC \*c'of- 'to leak, seep' and \*c'afk'- 'to soak' suggests that \*k' originated, for instance, as an intensifier. But considerably more instances would be needed to establish this suggestion as a cogent inference.

There is another strategy that yields immediate and convincing explanations of third consonants in roots: internal reconstruction in Semitic, specifically in Arabic. In Arabic and other Semitic languages it has long been evident that there are numerous sets of trilateral roots that share similar or related meanings and are formally identical except in their third consonants. When the verb members of such sets are grouped according to their third consonants, there emerge recurrent correlations between the presence of particular consonants in C<sub>3</sub> (third) position and the presence of particular varieties of meaning modification in the roots containing those C<sub>3</sub>. Internal reconstruction thus reveals semantic patterns that seem explicable only on the presumption that the various C<sub>3</sub> originated in pre-Proto-Semitic as suffixed verbal extensions. Considering the span of time which must have passed since most such extensions would last have been productive, the correlations of meaning and form are remarkably consistent, and the case to be made is therefore exceedingly strong.

## 2

## Presenting the Argument\*

The internal reconstruction presented here is for *Arabic*, the best-attested Semitic language. The evidence is presented in two phases. The first lays out for each third consonant (C<sub>3</sub>) an array of the smaller sets of roots of linked meaning that have identical first and second consonants (C<sub>1</sub> and C<sub>2</sub>) and one member of which contains the particular C<sub>3</sub> under consideration. Each array is introduced by a discussion of the verb-extensional meaning that the array allows one to attribute to that C<sub>3</sub>. The second phase presents a large number of additional sets of such roots, but grouped in an opposite manner, that is, according to their identical first two consonants so that the different semantic modifications accompanying their differing

\* See p. 202, note.

third consonants can be viewed in a clear contrastive perspective. These latter sets contain up to fifteen or more roots of the same  $C_1$  and  $C_2$ , with the proposed verb-extensional meaning of each  $C_3$  in the set labeled.

The source of the vocabulary used below is Steingass's *Arabic-English Dictionary*. His English glosses of Arabic roots have generally been reproduced as he gives them. They often have an archaic or foreign flavor about them, but only in a very few cases have I slightly modified his wording of a gloss. The verb forms cited are his infinitives, and so the English marker of the infinitive, 'to,' has normally been inserted at the beginning of a verb gloss.

The evidence constituting the first phase of the argument, in which the proposed extensional meanings are identified, is laid out in a series of tables, one for each of the extensions. Six of the consonants in third position can alternatively derive from noun- or modifier-forming suffixes, and apparent cases of these suffixations are noted in separate supplements to the tables for the particular consonants concerned.

The tables are arranged in four columns. The first column of each table lists trilateral roots containing the specific third consonant dealt with in that table, along with their meanings. The information for evaluating the function of the  $C_3$  in each entry of a table is shown in the other three columns.

The second column notes the biconsonantal root containing the same  $C_1$  and  $C_2$  as, and semantically relatable to, the trilateral of the first column, providing such a biconsonantal form is known. The roots in the second column are actually rendered in a trilateral form,  $C_1C_2C_2$ , in which the second consonant is repeated. There is a reduplicative process in Cushitic that has a similar formal effect ( $CVC_2 > CVC_2(V)C_2$ ) and imparts an iterative or intensive sense to a verb root (Ehret 1980, 1987), but that process is not in evidence here. In general, this kind of gemination in Arabic must be understood as the necessary outcome of the overall morphology of the verbal system, which requires a trilateral base on which to operate. Also included in the second column are any equivalent roots of reduplicated biliteral shape ( $C_1C_2C_1C_2$ ); these do impose an intensive or iterative implication on the meaning of the simple biconsonantal form.

The third column lists one or more further cases of roots semantically relatable to the root in the first column. These have the same first two consonants as their mate in the first column, but a different consonant in  $C_3$  position.

The fourth column of the table provides space for comments on the semantic links involved in a set of roots. These comments are introduced principally under two headings, *connecting sense* and *contrast*. The first notation is followed by what is in effect a reconstructed meaning for the earlier biconsonantal root that can be postulated to underlie the particular set of semantically relatable roots of like  $C_1$  and  $C_2$ , adjoining in columns 1–3. The second notation is used when the comparison is between single trilaterals in columns 1 and 3, and the two together pro-

vide an especially telling example of the contrasting semantic effects of the different  $C_3$  found in each.

The Semitic sibilant reconstructions of Alice Faber (1985) have been adopted here as best accounting for the evidence. In particular, the consonant most often interpreted in the past as Proto-Semitic (PS)  $*s$  has been rendered as the affricate PS  $*c$ , while the consonant frequently given as  $*š$  has been written as  $*s$ . Alone of all the recognized PS consonants, these two have fallen together, as  $/s/$ , in Arabic. Uncited comparative Semitic evidence had to be used at several points to determine whether  $*c$  or  $*s$  was to be reconstructed for pre-Arabic stages.

## 3

## Reconstructing the Uses of the Third Consonants

Thirty-seven distinct ways of modifying verb root meanings can be attributed to the various  $C_3$ , more than there were different possible third consonants in Semitic. The reason is that several  $C_3$  had two distinctive extensional functions, apparently because those consonants derived from the collapsing in Proto-Semitic of two separate Afroasiatic consonants. For example, Proto-Afroasiatic (PAA) had two velar series, one labialized and the other not (cf. Ehret 1987); thus PS velars  $*g$ ,  $*k$ ,  $*k$ ,  $*x$ , and  $*\gamma$  represent the coalescence respectively of PAA  $*g$  and  $*g^w$ ,  $*k$  and  $*k^w$ ,  $*k^p$  and  $*k^{w,p}$ ,  $*x$  and  $*x^w$ , and  $*\gamma$  and  $*\gamma^w$ . Similarly, the four PAA oral labials required by both the Cushitic and the Chadic evidence—probably  $*b$ ,  $*p$ ,  $*p'$ , and  $*f$ —collapsed down to two,  $*b$  and  $*p$ , in Proto-Semitic, while PS  $*s$  appears to conflate PAA  $*s$  and  $*s'$  (Ehret, work in progress). In addition, several  $C_3$  apparently also acted as the bases of noun and modifier suffixes in pre-Proto-Semitic, and probable cases of these have to be distinguished as well.

If we are right in assuming that the thirty-seven extensions had become non-productive, and the forms containing them lexicalized, by the Proto-Semitic period, then the meanings identified for them by internal reconstruction must be projected back to the last point in time at which they were still productive, i.e., pre-Proto-Semitic. Once lexicalization had taken place, they would no longer have been subject to a shift in function or meaning, except insofar as the words of which they had become a part underwent meaning change. The extensions reconstructed below are thus quite old, even if the evidence for them comes from a much more recent source.

1.  $\text{ʔ}$  middle voice extension

The presence of  $\text{ʔ}$  in  $C_3$  position had semantic effects that allow it to be given the designation of “middle voice.” First, its occurrences often have the reflexive/benefactive effect of the classic middle voice. Second, it had the particular pair of functions—factive/inchoative as well as reflexive/autobenefactive—that also

## ORIGIN OF THIRD CONSONANTS

characterize the cognate Eastern Cushitic \**d'* middle root extension, identified and described by R. J. Hayward (1975, 1984). One further outcome in Semitic was for originally inchoative formations in \**d* to become transitivity, transmitting the inchoative into a durative or iterative effect. This effect is also noted for \**w* and \**y* as C<sub>3</sub>; it is an understandable result of transitivity of a verb meaning, since inchoation ("becoming") itself implies duration. See table 1.

*Table 1*  
\**d* middle voice extension

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>rafḏ</i> 'to be large, begin to cluster'	<i>raff</i> 'to spread the wings for flying; herd, swarm, flock'	<i>rafʕ</i> 'to lift, lift up, hoist' <i>rafḏ</i> 'to lift, lift up' (see table 39:77)	reflexive (original sense 'to expand, make rise or increase')
<i>rakḏ</i> 'to move the feet, stamp, tread, run, gallop, flee'		<i>rukūb</i> 'to ride, drive, sail, embark, mount' <i>rakl</i> 'to put into a gallop'	reflexive (original sense 'to grasp'); 3rd sense going')
<i>qabḏ</i> 'to close the hand, make a fist, seize and hold'	<i>qabb</i> 'to lift a little'	<i>qabs</i> 'to fetch fire from; learn from' <i>qabs</i> 'to take with the fingertips' (and other forms for which see table 38:41)	reflexive (original sense 'to grasp'); 3rd sense transitivity, yielding a durative
<i>qarḏ</i> 'to gnaw, nibble'	<i>qarr</i> 'to drink its fill at a time'	<i>qarab</i> 'to travel the night through to get to the water' <i>qarš</i> 'to gnaw at' (see table 39:87)	durative (or iterative) outcome
<i>farḏ</i> 'to make incisions, notches'	<i>farfar</i> 'to break, cut, tear to pieces'	<i>farj</i> 'to put asunder, separate, split' <i>farq</i> 'to split, separate' (and other forms for which see table 38:37)	factive or inchoative
<i>maṣḏ</i> 'to be complicated, difficult'		<i>maṣaz</i> 'to be hard'	
<i>nabḏ</i> 'to beat, throb'		<i>nabḏ</i> 'to beat, throb'	reflexive (presumed original sense 'to hit')
<i>naṣḏ</i> 'to receive, accept'		<i>naṣḏ</i> 'to take with the hand'	autobenefactive (take for or to oneself)
<i>harḏ</i> 'to tear one's garment'		<i>hart</i> 'to pierce, tear, rend' <i>hard</i> 'to tear, rend, unsew, split' <i>harm</i> 'to cut tobacco minutely'	autobenefactive

2.

*\*h* amplificative

The presence of *\*h* in C<sub>3</sub> position appears to mark an action carried out to a fuller extent than the action attributable to the underlying biliteral root. Hence, it is identified as an amplificative rather than as an intensive or durational marker. See table 2.

Table 2  
*\*h* amplificative

Triliteral root	Simple form	Other related forms	Semantics
<i>ʔanh</i> 'to promise by contract, stipulate, prescribe, recommend'	<i>ʔamm</i> 'to intend, strive after'	<i>ʔamt</i> 'to guess or try to determine the number or quantity, intend' (and other forms for which see table 13a)	
<i>ʔanh</i> 'to breathe heavily, sigh, groan'	<i>ʔann</i> 'to groan'	<i>ʔanīt</i> 'to groan, sigh'	contrast: amplificative (breathe <i>heavily</i> ) vs. durative
<i>rafh</i> 'to lead a comfortable and enjoyable life'	<i>raff</i> 'to treat kindly, honor' <i>rafrac</i> 'to wish well to, protect'	<i>rafʔ</i> 'to quiet, free from fear' <i>rafay</i> 'to be comfortable and enjoyable (life)' <i>rifq</i> 'to be gentle, kind toward'; <i>rafw</i> 'to quiet, free from fear' (see table 39:81)	
<i>šarah</i> 'to be greedy for food or drink, eat or drink greedily'	<i>šaršar</i> 'to bite, graze off and chew'	<i>šarb</i> 'to drink' <i>šarq</i> 'to swallow in a moment, sip, imbibe'	
<i>kamah</i> 'to be blind'	<i>kamm</i> 'to cover, conceal, stop, shut up'	<i>kamt</i> 'to suppress one's anger' <i>kamr</i> 'to cover, veil, conceal' <i>kumūn</i> 'to hide' <i>kamy</i> 'to withhold one's evidence'	
<i>mauh</i> 'to abound in water, be full of sap, draw water (ship)'		<i>maur</i> 'to flow' <i>mauṣ</i> 'to wash to the shore earth, sand, etc.'	connecting sense: 'to wet'
<i>maih</i> 'to give water to drink, abound in water, draw in water'		<i>mauṣ</i> 'to wash slightly' <i>maiθ</i> 'to dip into water, soften, dissolve, macerate'	

## ORIGIN OF THIRD CONSONANTS

*Table 2 (cont.)*

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
		<i>maiḥ</i> 'to descend into the well to draw water'	
		<i>maiʕ</i> 'to flow slowly over a surface, melt'	
		<i>māʔ</i> 'water'	
<i>nazh</i> 'to drive the camels far from water, keep aloof from evil'		<i>nazʕ</i> 'to take away, snatch from the place, tear off, pull out'	connecting sense: 'to drive, send, take away'
		<i>nazw</i> 'to assail, attack'	
<i>wamah</i> 'to be very hot'		<i>wamad</i> 'to be very sultry'	connecting sense: 'to burn, shine'
		<i>wamḍ</i> 'to flash slightly, lighten without thunder'	

### 3. *\*w* inchoative / denominative

The occurrence of *\*w* as the third consonant can be seen (1) from the comparative Cushitic evidence (Ehret 1980, 1987; Hayward 1984) and (2) from Arabic data presented here as having originated in most cases as an inchoative, apparently with denominative function as well. In transitivized verbs it was transmitted into a durative, as was the *\*ḍ* middle voice extension. Examples of these different effects are noted separately in table 3.

*Table 3*  
*\*w inchoative / denominative*

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>ʔazw</i> 'to grow short (shadow when sun is high)'		<i>ʔazf</i> 'to be insignificant'	connecting sense: 'to be small, have little'
		<i>ʔazl</i> 'to be in need, misery, shorten a horse's tether and allow it to graze, not allow cattle to pasture (from fear of scarcity of food)'	
<i>baxw</i> 'to subside, calm down'		<i>baxs</i> 'to diminish'	connecting sense: 'to lower'
<i>ḥaḍw</i> 'to go a slow pace' (i.e., be hindered in moving)		<i>ḥaḍr</i> 'to prevent, hinder, prohibit, render inaccessible, surround with a wall'	connecting sense: 'to hinder, hamper'

Table 3 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>ḥaḏl</i> 'to hinder in spending money, in freedom of motion'	
<i>ḥanw</i> 'to bend, crook, contort, bend the head'		<i>ḥanj</i> 'to bend, twist strongly'	connecting sense: 'to turn' (tr.)
<i>ḏaʕw</i> 'to wither'		<i>ḥanf</i> 'to bend'	
		<i>ḏaʕt</i> 'to throttle savagely';	connecting sense: 'to make perish'
		<i>ḏaʕj</i> 'to tear, kill' (and other forms, for which see table 38:14)	
<i>šabw</i> 'to be high'	<i>šabb</i> 'to grow up, become a young man'	<i>šabḥ</i> 'to extend a skin between pegs, stretch out the hand, arms'	connecting sense: 'to grow wider, longer, higher; extend'
<i>ḏaḥw</i> 'to be clear, visible in the sunlight'	<i>ḏiḥḥ</i> 'sun, sunlight'	<i>ḏaḥk</i> 'to lighten' (of lightning)	contrast: inchoative / denominative vs. durative
<i>šabw</i> 'to shine, be bright'	<i>šab</i> 'sunlight'		
<i>ṭaḥw</i> 'to spread, be spread, lie on the side'	<i>ṭaḥḥ</i> 'to spread, tread flat with the heel'	<i>ṭaḥs</i> 'to lie with'	connecting sense: 'to lay flat'
		<i>ṭaḥr</i> 'to lie with'	
<i>fašw</i> 'to spread, become public'		<i>fašh</i> 'to open the legs, deviate from the right way'	connecting sense: 'to spread apart'
		<i>fašq</i> 'to break'	
<i>maʕw</i> 'to widen, stretch, lengthen out'		<i>maʕd</i> 'to become juicy and begin to grow'	connecting sense: 'large' or 'to be large'
		<i>maʕas</i> 'to gape, be large (wound)'	
<i>maṭw</i> 'to stretch, extend'	<i>maṭṭ</i> 'to stretch by pulling, stretch; pull up the bucket, lengthen, stretch one's self'	<i>maṭl</i> 'to prolong, stretch, lengthen, delay, defer'	
<i>kabw</i> 'to fall on one's face, trip, tumble, fall'	<i>kabb</i> 'to throw one with the face to the ground, overthrow'	<i>kabt</i> 'to throw down, subdue, tame'	
		<i>kabs</i> 'to fall upon and take by surprise'	
Transitivized forms (> extensative, sometimes fortative)			
<i>tabw</i> 'to invade and make booty'	<i>tabb</i> 'to cut off, destroy'	<i>tabr</i> 'to break into pieces, destroy, annihilate'	
		<i>tabl</i> 'to destroy, annihilate'	

# ORIGIN OF THIRD CONSONANTS

Table 3 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>dajw</i> 'to cover, wrap up, cover with darkness'	<i>dajdāj</i> 'pitch dark' <i>dujuj</i> 'deep darkness'	<i>dajm</i> 'to be dark' <i>dajn</i> 'to be cloudy, dark, rainy, cloudy sky'	
<i>ʕaḏw</i> 'to dissect, separate, sever'	<i>ʕaḏḏ</i> 'to cut, lop, prune'	<i>ʕaḏb</i> 'to cut off, lop'	
<i>ɣaḏw</i> 'to be dark, cover, veil, envelop in darkness'		<i>ɣaṣ</i> 'to be dark' <i>ɣaṭl</i> 'to be covered with clouds' <i>ɣaṭy</i> 'to be dark'	
<i>lamw</i> 'to take all'	<i>lamm</i> 'to gather, amass, concentrate'	<i>lamʔ</i> 'to set hand to, take all, steal' <i>lamʂ</i> 'to pinch' <i>lams</i> 'to touch, feel' <i>lamk</i> 'to knead dough'	connecting sense: 'to hold'
<i>maqw</i> 'to suck strongly'	<i>maqḡ</i> 'to suck the udder'	<i>maqʕ</i> 'to drink quickly and strongly'	
<i>naḏw</i> 'to spread, scatter, publish, make known'	<i>naḏḏ</i> 'to publish, communicate'	<i>naḏr</i> 'to spread, scatter' <i>naḏt</i> 'to sprout, grow'	connecting sense: 'to spread'
<i>nazw</i> 'to assail, attack'		<i>nazʕ</i> 'to take away, snatch from the place, tear off, pull out' <i>nazh</i> 'to drive the camels far from water'	connecting sense: 'to drive, send'

3a.

\*w deverbative noun suffix

Another affix containing \*w as its consonant, a noun suffix possibly originating as a deverbative, is known from Cushitic (Ehret 1980, 1987). This marker apparently also has reflexes in Semitic C<sub>3</sub>. See table 3a for examples.

Table 3a

\*w deverbative noun suffix

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>ḏaʕw</i> 'soft, unripe dates'	<i>ḏaʕʕ</i> 'to vomit'	<i>ḏaʕb</i> 'to make flow, shed' <i>ḏaʕḏ</i> 'soft, fresh' (and other related forms, for which see table 38:7)	connecting sense: 'to wet down' (hence soften)
<i>xazw</i> 'to slit the tongue of a camel's foal'	<i>xazz</i> 'to pierce and nail'	<i>xazq</i> 'to hit and pierce' <i>xazl</i> 'to cut, lop' <i>xazʕ</i> 'to cut off' <i>xazm</i> 'to split, pierce'	<i>xazw</i> : presumed earlier noun sense 'slit, cut'

Table 3a (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>rabw</i> 'hill'	<i>rabb</i> 'to gather, increase, complete'	<i>rabʔ</i> 'to lift up, elevate, be high, sublime' <i>rabt</i> 'to bring up, educate' (and other related forms, for which see table 39:75)	connecting sense: 'to increase, raise'
<i>rafw</i> 'fine seam, to mend, darn'		<i>rafʔ</i> 'to mend anything torn' <i>rafs</i> 'to tie up a camel with a rope' (and other related forms, for which see table 39:83)	connecting sense: 'to tie'
<i>rahw</i> 'calm, to be calm'		<i>rahk</i> 'to remain, abide' <i>rahn</i> 'to last'	connecting sense: 'to stay, be still'
<i>layw</i> 'idle talk, talk, conversation, topic of conversation, to speak, indulge in idle talk'	<i>laylay</i> 'to stammer'	<i>layb</i> 'to tell an untruth' <i>laym</i> 'to tell uncertain things abroad' <i>layān</i> 'tone, sound, voice, noise' <i>layan</i> 'idle talk'	connecting sense: 'to talk'

## 4. \*y inchoative / denominative

It would seem that the consonant \*y had a verb function parallel in every respect to \*w. Like \*w it appears reconstructible to an early stage in the evolution of the Afroasiatic family because it can also be found as an inchoative / denominative in the Southern Cushitic languages (Ehret 1980). See table 4.

Table 4

## \*y inchoative / denominative

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>daʔy</i> 'to have a thin, delicate body'		<i>daʔal</i> 'to make one's self small'	
<i>lafy</i> 'to stick to a place, remain, abide'	<i>laʔʔ</i> 'to attend zealously to, join, fasten'	<i>laʔʔ</i> 'to stick in the ground, be near the ground' <i>luf</i> 'to be near, approach' <i>laʔm</i> 'to glue, attach, fasten on'	connecting sense: 'to put together'
<i>namy</i> 'to grow, increase,		<i>namr</i> 'to ascend, mount'	connecting sense: 'to rise

# ORIGIN OF THIRD CONSONANTS

Table 4 (cont.)

Triliteral root	Simple form	Other related forms	Semantics
<p>sprout, rise, raise, elevate'</p>		<p><i>namš</i> 'to pick up'  <i>naml</i> 'to climb'  <i>numuww</i> 'to grow, increase, rise'</p>	up'
<p><i>wašy</i> 'to be closely united, to join one thing to another, unite'</p>		<p><i>wasl</i> 'to unite one thing to another, join, combine'  <i>wasṁ</i> 'to unite quickly'</p>	connecting sense: 'to join, connect'
<p><i>wahy</i> 'to be weak, brittle, frail, perishable'</p>		<p><i>wahṭ</i> 'to be weak, faint'  <i>wahal</i> 'to be weak, timid'  <i>wahn</i> 'to be weak, too weak'</p>	connecting sense: 'to weaken'
<u>Probable denominatives</u>			
<p><i>jaʔy</i> 'to bite upon'</p>		<p><i>jaʔð</i> 'to drink without sipping or pausing'  <i>jaʔz</i> 'a fit of suffocation'  <i>jaʔs</i> 'to drink'</p>	presumed original noun sense 'bite' for simple root *gʔ
<p><i>saʔy</i> 'to hasten, run, hurry to a place'</p>		<p><i>saʔm</i> 'to walk very fast'</p>	presumed original noun sense 'haste' for simple root *sʔ
<p><i>waxy</i> 'to advance straight forward, intend, purpose'</p>	<p><i>waxx</i> 'intention'</p>	<p><i>waxd</i> 'to stride along (like an ostrich)'  <i>waxṭ</i> 'to step apace, run'</p>	
<p><i>yady</i> 'to touch, hit, or hurt on the hand, seize by the fore-foot; cut off the hand'</p>	<p><i>yad</i> 'hand'</p>		This is an undoubted case of a denominative
<u>Transitivized forms (&gt; exte</u>			
<p><i>zaby</i> 'to take up, carry'</p>		<p><i>zabq</i> 'to pluck the beard'</p>	connecting sense: 'to take out'
<p><i>safr</i> 'to carry off'</p>		<p><i>safr</i> 'to sweep the house, remove, disperse, chase away, take off the turban, veil'  <i>safn</i> 'to scrape off the rind, peel'</p>	connecting sense: 'to take away'
<p><i>šary</i> 'to cut, cut off, lop'</p>		<p><i>šarb</i> 'to cut off'  <i>šarm</i> 'to cut off, cull, pluck, break, tear'</p>	connecting sense: 'to cut'
<p><i>šaly</i> 'to roast meat'</p>		<p><i>šalb</i> 'to roast'</p>	connecting sense: 'to

Table 4 (cont.)

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
		<i>şald</i> 'to be shining (bald head)'	burn (something)'
		<i>şalq</i> 'to scorch'	
<i>laby</i> 'to eat much'	<i>lablab</i> 'to lick the newborn tenderly'	<i>labz</i> 'to eat hurriedly and greedily, swallow quickly'	connecting sense: 'to take a mouthful' (?)
		<i>labn</i> 'to eat much'	
<i>laθy</i> 'to drink slowly, lick out greedily'		<i>laθʔ</i> 'to lap up the contents of a vessel'	connecting sense: 'to lick'
		<i>laθaq</i> 'to have an impediment of the tongue and pronounce thickly'	
		<i>laθm</i> 'to kiss, kiss'	
<i>mary</i> 'to take out, pull out'	<i>marr</i> 'to pass, pass by, depart, go away'	<i>mart</i> 'to drive away'	
		<i>marj</i> 'to send an animal to pasture'	
<i>mahy</i> 'to gild'		<i>mahš</i> 'to scratch with the nails'	connecting sense: 'to rub, rub on'
		<i>mahk</i> 'to make soft and smooth'	
		<i>mahl</i> 'to smear camel with pitch'	

## 5.

*\*γ* complementive

The presence of *\*γ* as the third consonant marks roots that usually have a meaning in some way complementary to that of the simpler biconsonantal underlying root, hence the name chosen for it. It can denote a reciprocal action or an action directed oppositely to, or in some way apposite to or consequent upon, the action of the simple root. See table 5.

Table 5  
*\*γ* complementive

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>jaly</i> 'to cut one another with swords'		<i>jalx</i> 'to cut off a piece of skin, skin'	connecting sense: 'to cut off'; reciprocal
		<i>jald</i> 'to skin, flay'	
		<i>jalʔ</i> 'to shave, skin, flay'	
		<i>jalm</i> 'to lop'	

# ORIGIN OF THIRD CONSONANTS

Table 5 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>rafay</i> 'to be comfortable and enjoyable (life)'	<i>raff</i> 'to treat kindly, honor' <i>rafrac</i> 'to wish well to, protect'	<i>rafh</i> 'to lead a comfortable and enjoyable life' <i>rifq</i> 'to be gentle, kind toward' <i>rafʔ</i> 'to quiet, free from fear' <i>rafw</i> 'to quiet, free from fear'	
<i>šaby</i> 'to dye, immerse, dip into'	<i>šabb</i> 'to pour out, shed, be poured out'		action in opposite direction
<i>šady</i> 'to turn from, prevent, deny'	<i>šadd</i> 'to turn from, turn to'	<i>šadf</i> 'to turn round and lead to' <i>šadr</i> 'to return, especially from the watering place'	action in opposite direction
<i>laθay</i> 'to have an impediment of the tongue and pronounce thickly'		<i>laθʔ</i> 'to lap up the contents of a vessel' <i>laθm</i> 'to kiss' <i>laθy</i> 'to drink slowly, lick out greedily'	connecting sense: 'to lap'
<i>mašy</i> 'to eat or chew anything soft'	<i>mašš</i> 'to suck the marrow out of a bone'	<i>mašʔ</i> 'to chew'	
<i>wazay</i> 'nimbleness' (presumed earlier sense 'to be nimble')	<i>wazwaz</i> 'to walk with strong movement of the hips, leap fast'	<i>wazf</i> 'to hasten, walk fast, urge to haste' <i>wazk</i> 'to walk fast or in an ungraceful manner'	connecting sense: 'to step quickly'
<i>watay</i> 'to commit a crime, be guilty of such, be blame-worthy'		<i>watr</i> 'to hate and persecute, bring calamity, enmity on, cheat, deprive one of part of his fortune, wrong'	contrast: complementive vs. diffusive (connecting sense: 'to wrong')
<i>našy</i> 'to flow'	<i>našš</i> 'to boil, bubble' <i>našnaš</i> 'to boil, bubble'	<i>našb</i> 'to spout or gush forth' <i>našij</i> 'to bubble' <i>našaj</i> 'aqueduct, canal'	connecting sense: 'to overflow'

6.

\**k* andative

The occurrence of *q* (PS \**k*) in third position can reflect either of two different kinds of meanings, action directed to or toward the object—the andative noted here in table 6—or intensive, for which see table 31 below.

Table 6  
\*k andative

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
ʔafq 'to travel to distant parts'		ʔafad 'to approach, come up'	connecting sense: 'to come' (contrast: andative vs. durative)
ʔauq 'to incline toward'		ʔaub 'to return' ʔaud 'to bend' ʔaul 'to return'	original sense of simple root was probably 'to turn'
balq 'to carry off, wash away'	ball 'to wet, sprinkle'		
ðarq 'to drop excrement, spring, gush forth'	ðarr 'to scatter, sprinkle, strew'	ðarf 'to flow, shed tears' ðarʔ 'to disperse' ðarm 'to give birth before time' ðarw, ðary 'to throw corn against the wind to clean it, winnow, sow'	second meaning of ʔarq reflects function of *q as intensive, for which see table 31
rifq 'to be gentle, kind toward'	raff 'to treat kindly, honor'	rafay 'to be comfortable and enjoyable (life)' rafʔ 'to quiet, free from fear' rafw 'to quiet, free from fear'	
zaʕq 'to cry to or call out to'		zaʕj 'to cry out' zaʕt 'to bray' zaʕm 'to say, pretend, assert, talk over, give one's opinion'	connecting sense: 'to call'
warq 'to get leaves, ramify, branch out'		warf 'to extend in length and breadth' waram 'to swell, be swollen'	connecting sense: 'to grow, increase in size'

7.

## \*ʕ sunderative

Action taking-the-object-away-from is recurrently associated with \*ʕ as the third consonant. The examples of this third consonant commonly enough connote a somewhat forceful separation such that the name "sunderative" seemed to suit it. Since motion-away-from often is also motion-toward somewhere else, this consonant can sometimes turn up on verbs of more normally andative sense. See table 7.

# ORIGIN OF THIRD CONSONANTS

Table 7  
\*ʕ *sunderative*

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>jaʕʕ</i> 'to cut off'	<i>jazz</i> 'to shear, shave, cut, mow, reap'	<i>jazr</i> 'to cut off' <i>jazʔ</i> 'to take a part of, divide' <i>jazl</i> 'to cut, cut through, cut off, cut asunder' <i>jazm</i> 'to cut off, lop, break off'	
<i>xazʕ</i> 'to cut off'	<i>xazz</i> 'to pierce and nail'	<i>xazq</i> 'to hit and pierce' <i>xazl</i> 'to cut, lop' <i>xazm</i> 'to split, pierce' <i>xazq</i> 'to slit the tongue of a camel's foal'	
<i>raffʕ</i> 'to lift, lift up, raise'	<i>raff</i> 'to spread wings for flying, herd, swarm, flock'	<i>rafd</i> 'to lift, lift up' (and other forms for which see table 39:77)	
<i>zarʕ</i> 'to sow, scatter seed, seed'		<i>zarib</i> 'to flow, run, run out, flow over' <i>zarq</i> 'to drop excrement' <i>zaram</i> 'to give birth'	connecting sense: 'to spill'
<i>zalʕ</i> 'to take slyly' (i.e., to slip away with)	<i>zall</i> 'to slip, stumble'	<i>zalj</i> 'to glide along swiftly and lightly' <i>zalx</i> 'slippery place' <i>zaliq</i> 'to slip, glide'	
<i>šarʕ</i> 'to lift very high, stretch the neck'		<i>šarj</i> 'to pile up bricks' <i>šurūx</i> 'to grow up' <i>šaraf</i> 'to be high, tower over, surpass, conquer' <i>šarq</i> 'to rise, shine, sunrise'	connecting sense: 'to raise'
<i>faḍʕ</i> 'to break wind, drop excrement'	<i>faḍḍ</i> 'to break off, detach, open, unseal, divide, disperse'	<i>faḍx</i> 'to beat in pieces, dash, shatter, pull out an eye, pour out' <i>faḍḥ</i> 'to disclose one's crime, expose, to break forth (dawn)'	
<i>qaʕʕ</i> 'to cut, cut off, lop, amputate, break off, tear off, sever'	<i>qaʕʕ</i> 'to cut'	<i>qaʕb</i> 'to cut' <i>qaʕf</i> 'to cull, pluck' <i>qaʕl</i> 'to cut off' <i>qaʕm</i> 'to cut off'	
<i>katʕ</i> 'to go away with, escape with, rob'	<i>katt</i> 'to walk slowly or hasten with short steps'	<i>katf</i> 'to walk slowly or move the shoulders in walking' <i>katw</i> 'to walk with short steps'	

8.

\**ʔ* venitive

In the C<sub>3</sub> position, \**ʔ* apparently originated as a venitive. In some cases this is still overt; in many cases it is implied by the fact that the action denoted by the verb is, in its effective segments, directed by the actor toward itself. This latter relationship appears most notably in the numbers of verbs in \**ʔ* that deal with scratching, peeling, and other actions in which the instrument is drawn toward the actor. See table 8.

Table 8  
\**ʔ* venitive

Triliteral root	Simple form	Other related forms	Semantics
<i>ʔabš</i> 'to gather hastily, grasp up'	<i>ʔabb</i> 'to put the hand to, shove, agitate'	<i>ʔabʔ</i> 'to throw, hit, shoot' <i>ʔabt</i> 'to throw down, throw to the ground'	
<i>baʔš</i> 'to seize, attack, carry off by force'		<i>baʔah</i> 'to throw one upon his face'	contrast: venitive ('seize') vs. amplificative
<i>jaʔš</i> 'to come up to, approach'	<i>jaʔjaʔ</i> 'flight, dispersion'	<i>jaʔθ</i> 'to walk along with a heavy load' <i>jaʔf</i> 'to throw on the ground, frighten' <i>jaʔl</i> 'to come and go, gather'	connecting sense: 'to move'
<i>jaḥš</i> 'to scratch the skin'		<i>jaḥf</i> 'to peel, shell, pare, sweep away' <i>jaḥw</i> 'to uproot'	connecting sense: 'to scrape off'
<i>jarš</i> 'to rub, comb, peel, pare'		<i>jard</i> 'to strip, peel, shave' <i>jarz</i> 'to cut off, lop' <i>jarf</i> 'to take up and remove, shovel or sweep away, scour, hew, hoe' <i>jarm</i> 'to cut off, take away'	connecting sense: 'to remove, strip'
<i>jamš</i> 'to shave, smooth'	<i>jamm</i> 'to cut off tree at the surface of the ground'	<i>jamd</i> 'to cut, cut off'	
<i>fajš</i> 'to widen'	<i>fajj</i> 'to open the legs, be splay-footed, widen a bow'	<i>fajr</i> 'split, opening, hole' <i>fajw</i> 'to open (door, legs)'	
<i>maʔš</i> 'to separate by the fingers'	<i>matt</i> 'to pull rope out of well, draw water'	<i>maṭḥ</i> 'to draw water from the well, pull out'	

# ORIGIN OF THIRD CONSONANTS

Table 8 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>matx</i> 'to pull out'	
		<i>math</i> 'to pull up (the bucket out of the well)'	
		<i>mats</i> 'to try to pull out'	
<i>maḥš</i> 'to peel off the skin'		<i>maḥs</i> 'to knead, scrape and tan'	connecting sense: 'to scrape, wipe, rub'
		<i>mahj</i> 'to skin, decorticate, make flexible by rubbing, wipe'	
		<i>maḥq</i> 'to efface, blot out'	
		<i>maḥw</i> 'to efface entirely, wipe off'	
		<i>maḥy</i> 'to efface, blot out, destroy'	
<i>maš</i> 'to feel, examine with the hand'		<i>mals</i> 'to smooth, pacify, flatter, coax by stroking'	connecting sense: 'to touch'
		<i>malð</i> 'to rub on the hand'	
<i>maḥš</i> 'to scratch with the nails'		<i>mahl</i> 'to smear camel with pitch'	connecting sense: 'to rub'
		<i>mahk</i> 'to make soft and smooth'	
		<i>mahy</i> 'to gild'	

9.

\*š focative

When PS \*š appears as C<sub>3</sub>, the verbs containing such \*š recurrently connote an action with a narrowly focused locus or an action that is itself narrow rather than diffuse in its scope. See table 9.

Table 9  
\*š focative

Trilateral root	Simple form	Other related forms	Semantics
<i>tašaš</i> 'to feel pain in the sinews of the foot from walking'	<i>tašš</i> 'to be weak, languid'	<i>tašab</i> 'to be tired'	
		<i>tašs</i> 'to perish, fall on the face, stumble and fall'	
<i>dašš</i> 'to lift up the foot'	<i>dašdaš</i> 'to run slowly and with short steps to and fro'	<i>dašθ</i> 'to stir up dust'	connecting sense: 'to step'
		<i>dašs</i> 'to tread under foot, footprint'	

Table 9 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>šauṣ</i> 'to take a thing from its place'		<i>daṣq</i> 'to trample on' <i>šaur</i> 'to take out honey' <i>šauk</i> 'to pull out a thorn' <i>šaul</i> 'to lift up, take from a place, carry a burden'	connecting sense: 'to draw (out)'
<i>qabṣ</i> 'to take with the fingertips, take a pinch'	<i>qabb</i> 'to lift a little'	<i>qabṭ</i> 'to seize and hold, grasp' (and other forms, for which see tables 1 and 38:41)	connecting sense: 'to take'
<i>lamṣ</i> 'to pinch'	<i>lamm</i> 'to gather, amass'	<i>lamʔ</i> 'to set hand to' <i>lams</i> 'to touch, feel' <i>lamk</i> 'to knead dough' <i>lamw</i> 'to take all'	connecting sense: 'to hold'
<i>naḥṣ</i> 'to emit urine forcibly'	<i>naḥḥ</i> 'to sow the ground' (i.e., toss out the seed)	<i>naḥj</i> 'to creep out of the egg' <i>naḥāz</i> 'to come forth, appear, arrive, reach' <i>naḥr</i> 'to flee and disperse, run away' (and other related forms, for which see table 38:58)	
<i>nabṣ</i> 'to speak'	<i>nabb</i> 'to bleat from rut'	<i>nabḥ</i> 'to bark, bellow, hiss' <i>nabr</i> 'to shout to, drive away by cries or shouts' <i>nabz</i> 'to give one a nickname, revile'	connecting sense: 'to cry, call out'
<i>waḥṣ</i> 'to break one's neck, throw one off so as to break his neck'		<i>waḥḍ</i> 'to crush, tread, beat fiercely, throw down; overwhelm, overpower' <i>waḥṭ</i> 'to beat fiercely and get the better of' <i>wuḥḍ</i> 'to fall down, fall, fall upon' <i>waḥm</i> 'to treat violently, subdue'	connecting sense: 'to knock down'

# ORIGIN OF THIRD CONSONANTS

10. \**θ* diffusive
11. \**r* diffusive

The occurrence of \**θ* or \**r* in third-consonant position is generally associated with actions that have, conversely, a broad locus of application or are uneven or irregular in their unfolding. Opposite in connotation to \**ʕ* (9), they seem well described by the name “diffusive.” See tables 10 and 11.

Table 10  
\**θ* diffusive

Trilateral root	Simple form	Other related forms	Semantics
<i>baqθ</i> ‘to stir up, bring into confusion’		<i>baqt</i> ‘to stir up’	connecting sense: ‘to stir, make move’
<i>ħaraθ</i> ‘to till and sow the ground’		<i>ħarb</i> ‘to sharpen’ <i>ħart</i> ‘to rub hard’ <i>ħarš</i> ‘to wound with the claws’ <i>ħarq</i> ‘to rub two things against each other’	connecting sense: ‘to scratch, scrape’
<i>daʕθ</i> ‘to stir up dust’	<i>daʕdaʕ</i> ‘to run slowly and with short steps to and fro’	<i>daʕs</i> ‘to tread under foot’ <i>daʕs</i> ‘to lift up foot’ <i>daʕq</i> ‘to trample on’	connecting sense: ‘to tread’
<i>raʕθ</i> ‘to bite and take off some flesh’		<i>raʕb</i> ‘to cut off’ <i>raʕð</i> ‘to make a hole in a spear or arrow to fix in the head’ <i>raʕl</i> ‘to pierce with a spear, strike with a sword’	connecting sense: ‘to prick, pierce, cut into’
<i>šaraθ</i> ‘to be thick and chapped’		<i>šarj</i> ‘to pile up bricks, mix’ <i>šurūx</i> ‘to grow up’ <i>šarʕ</i> ‘to lift very high, stretch the neck’ <i>šaraf</i> ‘to be high, tower over, surpass, conquer’ <i>šarq</i> ‘to rise, sunrise’	connecting sense: ‘to raise’
<i>ḍayaθ</i> ‘to give a confused report, rustle, whistle’	<i>ḍayḍay</i> ‘to pronounce indistinctly, stammer, make many words’	<i>ḍayb</i> ‘to cry’	connecting sense: ‘to speak’
<i>lakθ</i> ‘to beat’	<i>lakk</i> ‘to give one a blow with the fist’	<i>lakʔ</i> ‘to beat with a scourge’	

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Table 10 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>lakḥ</i> 'to beat with the fist'	
		<i>lakḍ</i> 'to beat with the fist'	
		<i>lakd</i> 'to beat with the hand, kick'	
		<i>lakz</i> 'to beat with the fist on the chest or chin, box'	
		<i>lakṣ</i> 'to beat the beast of burden'	
		<i>lakm</i> 'to beat with the fist on the chest and push back'	
<i>maʕθ</i> 'to rub, knead'		<i>maʕs</i> 'to rub vigorously'	connecting sense: 'to rub'
		<i>maʕš</i> 'to rub slightly'	
		<i>maʕk</i> 'to rub, roll on the ground'	
<i>mauθ</i> 'to mix up, dissolve in water'		<i>mauš</i> 'to wash to shore earth, sand, etc.'	
		(and other forms, for which see table 2)	

Table 11

\*r diffusive

Trilateral root	Simple form	Other related forms	Semantics
<i>ʔafar</i> 'to attack; drive away'		<i>ʔafx</i> 'to hit on the crown of the head'	contrast: diffusive vs. precipitive
<i>baxr</i> 'to steam'	<i>baxx</i> 'to drizzle'		
<i>baḏr</i> 'to sow, scatter seed, spread, preach'		<i>baḏʕ</i> 'to drop, fall in drops'	connecting sense: 'to separate, spread apart'
		<i>baḏḥ</i> 'to split, wound'	
<i>xasr</i> 'to lose one's way, go astray'		<i>kasʔ</i> 'to drive, scare away'	connecting sense: 'to leave, go away'
		<i>xasʕ</i> 'to be turned off, refused'	
		<i>xusūf</i> 'to sink, disappear, vanish'	
<i>dayr</i> 'to fall upon an enemy in a disorderly manner; rob by force'		<i>dayš</i> 'to attack'	connecting sense: 'to assault'
		<i>daym</i> 'to overpower, overwhelm'	

# ORIGIN OF THIRD CONSONANTS

Table 11 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>zaʔr</i> 'to roar, shriek roar [n.]'		<i>ziʔat</i> 'to talk much and boisterously' <i>zaʔf</i> 'to urge to speed' <i>zaʔm</i> 'to impart certain news on hearsay'	connecting sense: 'to call out'
<i>sabr</i> 'to probe or clean a wound, sound'	<i>sabb</i> 'to cut, wound'	<i>sabʔ</i> 'to skin, flay, scourge so as to tear the skin' <i>sabt</i> 'to cut off, behead, shave' <i>sabd</i> 'to shave off the hair'	
<i>šatr</i> 'to cut or tear into irregular pieces, mangle'	<i>šalt</i> 'to separate, scatter, disperse'		
<i>ḏafr</i> 'to plait, tie the hair together, twist a rope'	<i>ḏaff</i> 'to press one another in eating or at the water, gather'	<i>ḏaft</i> 'to tie together' <i>ḏafn</i> 'to come and sit by'	connecting sense: 'to come together'
<i>ḏafr</i> 'to throw food into the mouth of a beast of burden'		<i>ḏafz</i> 'to force a morsel into one's mouth' <i>ḏafs</i> 'to gather thistles and give them to the camel'	connecting sense: 'to give a portion of food to'
<i>ṭafr</i> 'to jump up (against a wall to reach what is behind)'		<i>ṭufāl</i> 'to rise' <i>ṭafw</i> 'to appear on the top of'	
<i>fayr</i> 'to open the mouth, open, expand, blos- som'	<i>fayγ</i> 'to spread'	<i>fayw</i> 'to spread, become known'	contrast: diffusive vs. in- choative
<i>kaur</i> 'to wind in spiral form, roll along'		<i>kaus</i> 'to be thrown head over heels, throw a somersault'	contrast: diffusive vs. fortative (connecting sense: 'to turn over')
<i>maxr</i> 'to rush through the sea, part the waves, water the ground'		<i>maxj</i> 'to draw the bucket after shaking it till it is full' <i>maxʔ</i> 'to secrete mucus, blow the nose' <i>maxn</i> 'to draw water, cry, weep'	connecting sense: 'to pro- duce water, fluid'
<i>namr</i> 'to ascend, mount'		<i>naml</i> 'to climb' <i>namy</i> 'to grow, increase, sprout, rise, raise, elevate'	connecting sense: 'to go up'
<i>wašr</i> 'to saw, sharpen teeth'		<i>wašz</i> 'to break loose a piece of the bone'	connecting sense: 'to slice'

Table 11 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>wašq</i> 'to cut meat into long strips'	
		<i>wašm</i> 'to tattoo the skin'	

11a.

\**r* noun suffix

In some cases the presence of \**r* as C<sub>3</sub> does not have a diffusive implication and can instead be suggested to have originated as a deverbative suffix forming noun complements of verbs. A noun suffix in \**r* is also known from Cushitic, although there it may originally have been a noun singular marker. See table 11a.

Table 11a  
\**r* noun suffix

Trilateral root	Simple form	Other related forms	Semantics
<i>baʕr</i> 'globular dung of animals, to drop excrement'	<i>baʕʕ</i> 'to pour out in abundance' <i>baʕbaʕ</i> 'gurgling of water'		
<i>bahr</i> 'calumny, to calumniate, abuse'	<i>bahbāh</i> 'to roar low and in a muffled manner, as if hoarse'	<i>baht</i> 'to accuse wrongly, lie' <i>bahθ</i> 'to receive with joy' <i>bahj</i> 'to rejoice, cheer' <i>bahl</i> 'to curse, curse [n.]'	connecting sense: 'to yell, cry out'
<i>ḥajr</i> 'hindrance, prohibition, to hinder, refuse admission or use of thing'		<i>ḥajb</i> 'to cover, veil, shut off, inclose, wall' <i>ḥajz</i> 'to shut off, cover, conceal' <i>ḥajl</i> 'fetter [n.]'	connecting sense: 'to stop' (tr.)
<i>fajr</i> 'split, opening, hole'	<i>fajj</i> 'to open the legs, be splay-footed, widen a bow'	<i>fajš</i> 'to widen' <i>fajw</i> 'to open (door, legs)'	
<i>kasr</i> 'breach, fracture, to break, wreck, overthrow, ruin'	<i>kass</i> 'to grind or pound to powder'	<i>kasʔ</i> 'to strike with a sword' (and other forms, for which see table 38:45)	
<i>majr</i> 'thirst, to be thirsty'	<i>majj</i> 'to inhale, imbibe'	<i>majd</i> 'to come to rich pasture lands, have its fill, or nearly so, of green food'	

# ORIGIN OF THIRD CONSONANTS

11b.

*\*r* modifier suffix

In still other instances of *\*r* in C<sub>3</sub> position without a diffusive connotation, it can plausibly be argued that such *\*r* at one time functioned as modifier formatives. An adjective suffix in *\*r* appears in Cushitic (e.g., Southern Cushitic in Ehret 1980) and apparently therefore can be reconstructed back to an early stage of Afroasiatic. See table 11b.

*Table 11b*  
*\*r* modifier suffix

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>baθr</i> 'much'	<i>baθθ</i> 'to disperse, blow away, spread a doctrine; disperse, spread about, publish'	<i>baθr</i> 'to get covered with pustules'	connecting sense: 'to spread, expand,' hence 'to increase'
<i>baθīr</i> 'much, many'		<i>baθaṭ</i> 'to swell'	
		<i>baθaṣ</i> 'to be full, curl (lips)'	
<i>bajar</i> 'to have a big belly, be full of water or milk without being sated'	<i>bajj</i> 'to fatten'		
<i>bajīr</i> 'a great many, very numerous'			
<i>qaṣr</i> 'shortness, to be short'	<i>qaṣṣ</i> 'to cut, cut off'	(see table 38:42 for this set)	presumed original adjective <i>*kṣr</i> 'short'; cf. etymologies of 'short' in English, Spanish, etc.
<i>kaθr</i> 'much, many'	<i>kaθθ</i> 'thick, dense'	(see table 38:44 for this set)	

12.

*\*k* finitive

13.

*\*l* finitive

Verbs with *\*l* as their third consonant recurrently express bounded actions, ones having distinct endings to them; hence the name "finitive" applied to this function. Verbs ending in *\*k*, however, can have either of two semantic tendencies. Some denote actions like those of verbs with *\*l* as C<sub>3</sub>, and in those cases *\*k* can be reconstructed as a finitive marker. Other *\*k* appear in verbs of opposite connotation, durative, for which see table 23. A subsidiary application of the finitives, especially common in instances of *\*l* as C<sub>3</sub> but also noted for *\*k*, was as markers of thoroughness or completeness as regards the extent to which an action is carried out. See tables 12 and 13.

Table 12  
\*k finitive

Trilateral root	Simple form	Other related forms	Semantics
<i>batk</i> 'to cut, cut off'	<i>batt</i> 'to cut, lop'	<i>batr</i> 'to maim, cut off, outroot' <i>bataʕ</i> 'to be cut off, separated' <i>batl</i> 'to cut off, separate, sever'	
<i>baḏk</i> 'to cut off, lop'		<i>baḏʕ</i> 'to cut off, split, cleave, shred, cut into pieces'	contrast: finitive vs. sun- derative (connecting sense: 'to cut')
<i>baʕk</i> 'to strike an arm or leg with a sword'		<i>baʕj</i> 'to split, slit, furrow, break into pieces' <i>baʕt</i> 'to slaughter, kill' <i>baʕq</i> 'to slaughter, split'	connecting sense: 'to cut with a large blade'
<i>darak</i> 'to reach, reach maturity'		<i>darb</i> 'path, road' <i>durūj</i> 'to step, step on-ward, walk' <i>daraq</i> 'to hurry, hasten' <i>darm</i> 'to run fast and with short steps, step gracefully'	connecting sense: 'to move along'
<i>rahk</i> 'to crush between two stones'		<i>rahs</i> 'to tread violently under foot' <i>raḥs</i> 'to press, be hard upon' <i>rahad</i> 'to rub violently'	connecting sense: 'to press, push against'; thoroughness of the action is connoted here
<i>salk</i> 'to cause to enter, put into'		<i>salq</i> 'to pierce with a lance'	contrast: finitive vs. in- tensive
<i>šauk</i> 'to pull out a thorn'		<i>šaur</i> 'to take out the honey' <i>šauʕ</i> 'to take a thing from its place' <i>šaul</i> 'to lift up, take from the place, carry a burden'	connecting sense: 'to draw (out)'
<i>hatk</i> 'to rend the veil and disclose anything hidden'	<i>hatt</i> 'to break, crumble, tear' <i>hathat</i> 'to break, crush'	<i>hatʔ</i> 'to tear, rend' <i>hatr</i> 'to tear, break' <i>hatm</i> 'to strike on the mouth and beat out one's teeth' <i>hatw</i> 'to crush with the foot'	connotation: thorough- goingness of the action

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Table 13

\*1finitive

Trilateral root	Simple form	Other related forms	Semantics
<i>buʔl</i> 'to happen in vain, fail'	<i>baʔʔ</i> 'to be enfeebled, low in health or circumstance'	<i>baʔs</i> 'to recover from fit of ague, although in a weak state' <i>buʔʔ</i> 'to render slow, move slowly or lazily'	
<i>tabl</i> 'to destroy, annihilate'	<i>tabb</i> 'to cut off, destroy'	<i>tabr</i> 'to break into pieces, destroy, annihilate'	contrast: finitive vs. diffusive ('break into pieces')
<i>jazl</i> 'to cut, cut through, cut off, cut asunder'	<i>jazz</i> 'to shear, shave; cut, mow, reap'	<i>jazʔ</i> 'to take a part of' (and other forms, for which see table 7)	
<i>xazl</i> 'to cut, lop'	<i>xazz</i> 'to pierce and nail'	<i>xazʔ</i> 'to cut off' (and other forms, for which see table 7)	connecting sense: 'to cut into'
<i>daql</i> 'to strike on the mouth, nose, neck or beard'	<i>daqq</i> 'to grind, pound, beat out, thresh, knock, rap'	<i>daqm</i> 'to break another's front teeth' <i>daqn</i> 'to hit on the beard'	connecting sense: 'to hit repeatedly'
<i>raʔl</i> 'to pierce with a spear, strike with a sword'		<i>raʔb</i> 'to cut off' <i>raʔz</i> 'to make a hole in a spear or arrow to fix in the head'	connecting sense: 'to cut'
<i>rakl</i> 'to put into a gallop'		<i>rukūb</i> 'to ride, drive, sail, embark, mount' <i>rakḍ</i> 'to move the feet, step, tread, run, gallop, flee'	connecting sense: 'to make go' or 'set to going'
<i>zajal</i> 'to throw, throw away, pierce with the point of a lance'	<i>zajj</i> 'to throw, shoot arrows, pierce with the point of a lance'		contrast: finitive ('throw away') vs. simple stem ('to throw')
<i>saxl</i> 'to clear, strain (wine), milk'	<i>saxx</i> 'to make water'	<i>saxb</i> 'to flow in rays, make the milk flow in rays'	contrast: finitive vs. extantative
<i>šaʔl</i> 'to light a fire, kindle'	<i>šuʔʔ</i> 'sunbeam' <i>šaʔšaʔ</i> 'to shine, sparkle'	<i>šaʔaf</i> 'to enflame, madden (love)'	contrast: finitive vs. intensive (of manner)
<i>šaml</i> 'to hold, contain, encompass'		<i>šamaʔ</i> 'to grasp, take away everything' <i>šamz</i> 'to take away gradually and in small quantities'	connecting sense: 'to gather in the hands'
<i>najl</i> 'to blot out, erase,		<i>najb</i> 'to bark a tree'	connecting sense: 'to

Table 13 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
wipe the writing tablet'		<i>najr</i> 'to cut or plane wood' <i>najf</i> 'to shave or polish an arrow' <i>najw</i> 'to cut down a tree and strip off its branches, skin a camel'	strip'; connotation: thoroughgoingness of the action
<i>naml</i> 'to climb'		<i>namr</i> 'to ascend, mount' <i>namy</i> 'to grow, increase, sprout, rise, raise, elevate'	connecting sense: 'to rise'
<i>hail</i> 'to pour out without measuring'		<i>haiṣ</i> 'to drop excrement' <i>haiḍ</i> 'to drop excrement' <i>haiḥ</i> 'to become fluid, melt'	connecting sense: 'to flow'
<i>wajl</i> 'to surpass in fear'		<i>wajs</i> 'to be seized with fear, take fright at'	contrast: finitive vs. fortative; connotation: thoroughgoingness of the action
<i>waʔl</i> 'to take refuge with, try to escape, escape'		<i>waʔr</i> 'to frighten, throw into calamity'	contrast: finitive vs. diffusive

13a. \**l* noun suffix (patient complement)13b. \**l* modifier suffix

The consonant \**l* can also occur in C<sub>3</sub> position in verbs of two other kinds, durative and essive/inchoative. The durative cases can co-occur with nouns having the same three consonants and a complementive meaning, thus appearing to be verb derivatives of original nouns. The essive/inchoative verbs in \**l* can plausibly be explained as derivatives in parallel fashion from earlier adjectives, although coexistent adjectives are harder to find; thus the case that can be made for this proposition is weak if one relies on Semitic evidence alone. But in Cushitic both noun and adjective suffixes in \**l* can be reconstructed, and the essive/inchoative examples of \**l* as C<sub>3</sub> have provisionally been attributed here to pre-PS adjectives, widely converted to verbs in Semitic. See tables 13a and 13b.

# ORIGIN OF THIRD CONSONANTS

Table 13a

\*1 noun suffix (patient / complement)

Trilateral root	Simple form	Other related forms	Semantics
ʔaml 'to hope, hope for' ʔamal 'hope'	ʔamm 'to intend, strive after'	ʔamt 'to guess or try to determine the number or quantity, intend' ʔamr 'to order, command' ʔamad 'to persist in spite of objections, remonstrances, etc.' ʔamn 'to trust' ʔamh 'to promise by contract, stipulate, prescribe, recommend'	
ʔufūl 'to decline toward setting' ʔafal 'time between afternoon and sunset, evening twilight'	ʔaff 'to be near setting'	ʔafð 'to bury' ʔafṛ 'to jump down' ʔafs 'to lie with' ʔufūs 'to die' ʔafn 'to die' ʔafw 'to die'	connecting sense: 'to descend, go down'
ʔabl 'drum'		ʔabj 'to beat on the head or anything hollow' ʔabʕ 'to seal, stamp, mark, make impress, print, forge a sword'	connecting sense: 'to hit, strike'
maʕl 'to drip'	maʕmaʕ 'to rinse the mouth, rinse a vessel'	maʕr 'to milk with three finger-tips' maʕt 'to wring out washed line'	presumed derivation from no longer extant noun 'drip, drop'
maʕl 'to hasten, urge to haste'; maʕil 'quick, fast, swift'	maʕmaʕ 'to dispatch one's work quickly'	maʕj 'to walk hurriedly' maʕd 'to travel over' maʕn 'to advance quickly and far, get the lead'	presumed derivation from no longer extant noun 'haste' or 'quickness'; or does this entry belong in table 13b?
ħajl 'fetter'	ħajj 'to desist' ħajħaj 'to be on the point of speaking but abstain, stop, stay'	ħajb 'to shut off, inclose, wall, cover, veil' ħajz 'to shut off, cover, conceal' (and other related forms, for which see table 38:9)	connecting sense: 'to stop' (tr.)

Table 13b  
 \*l modifier suffix

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>rabl</i> 'to be numerous, multiply, have many children'	<i>rabb</i> 'to gather, increase, complete'	<i>rabʔ</i> 'to lift up, elevate, improve, be high, sublime' <i>rabt</i> 'to bring up, educate' (and a variety of other roots, for which see table 39)	
<i>daʔal</i> 'to make one's self small'		<i>daʔy</i> 'to have a thin, delicate body'	
<i>daʕal</i> 'to be weakly (child, from too close relationship of parents)'	<i>daʕdaʕ</i> 'to make level with the ground, raze, humble, humiliate'	<i>daʕf</i> 'to be weak, not equal to, grow weak and thin'	
<i>maʔl</i> 'to prolong, stretch, lengthen, delay, defer'	<i>maʔt</i> 'to stretch by pulling, stretch, lengthen, stretch one's self'	<i>maʔw</i> 'to stretch, extend'	presumed source in no longer extant adj. * <i>mʔl</i> 'long, lengthy'
<i>najl</i> 'to abound in springs of water'	<i>najj</i> 'to bleed, suppurate'	<i>najx</i> 'to bring wind and rain' <i>najd</i> 'to drip with perspiration' <i>najw</i> 'to ease the bowels'	
<i>haml</i> 'to be bathed in tears, shed tears in profusion, flow, rain steadily and uniformly'		<i>hamr</i> 'to pour out, shed' <i>hamw</i> 'to flow' <i>hamʕ</i> 'to shed tears, cry, flow, drop'	presumed source in no longer extant adj. * <i>hml</i> 'drenching, flowing steadily' or noun * <i>hml</i> 'flow, outflow'

14. \*b finitive fortative

15. \*g finitive fortative

Two other consonants, \*b and \*g, also occur as C<sub>3</sub> in verbs of finitive sense. They seem to differ from the \*k and \*l finitives in that their presence often ties in with a strengthening—but not a great strengthening—of the action of the verb. For this reason it seemed inappropriate to call them intensives, and thus the more equivocal term “fortative” has been applied to them. See tables 14 and 15.

# ORIGIN OF THIRD CONSONANTS

Table 14  
\*b finitive fortative

Trilateral root	Simple form	Other related forms	Semantics
<i>jaʕb</i> 'to throw down'		<i>jaʕr</i> 'to drop excrement' <i>jaʕas</i> 'to ease the bowels' <i>jaʕz</i> 'to repel' <i>jaʕf</i> 'to throw to the ground; cut down' <i>jaʕl</i> 'to put, place, pile'	connecting sense: 'to let down'
<i>ħajb</i> 'to shut off, inclose, wall, cover, veil'		<i>ħajr</i> 'to hinder, refuse admission or use of a thing' <i>ħajz</i> 'to shut off, cover, conceal' <i>ħajl</i> 'fetter' (n.)	connecting sense: 'to stop' (tr.)
<i>daʕb</i> 'to push back, repudiate, expel'	<i>daʕʕ</i> 'to push violently, push aside'	<i>daʕt</i> 'to push violently' <i>daʕz</i> 'to push, push back' <i>daʕʕ</i> 'to kill'	
<i>ʕajb</i> 'to doom to destruction, ruin, sentence to death'	<i>ʕajj</i> 'to cleave or break the head, be wounded or scarred'	<i>ʕajam</i> 'ruin, perdition, death' <i>ʕajw</i> 'to overcome, conquer, subdue'	
<i>ʕaxab</i> 'to cry out, scream, shout'	<i>ʕaxx</i> 'to clash, clatter'	<i>ʕaxd</i> 'to shriek'	
<i>zaʕb</i> 'to cry out, bleat'	<i>zaʕʕaʕ</i> 'to bleat with rut, speak with a lisp and indistinctly'		contrast: finitive fortative (to cry out) vs. reduplicated simple form (intensive / frequentative)
<i>yaʕb</i> 'to take by violence or unlawfully, compel, force'		<i>yaʕn</i> 'to hold out a branch to, snatch, take' (second meaning < earlier noun 'seizure'? Table 17a shows examples of nouns in *n)	contrast: finitive fortative vs. non-finitive (first meaning of <i>yaʕn</i> )
<i>qaḏb</i> 'to cut off, lop off'	<i>qaḏḏ</i> 'to pierce, perforate, bore'	<i>qaḏm</i> 'to break, cut' <i>qaḏam</i> 'sword'	
<i>lasb</i> 'to bite'	<i>lass</i> 'to eat, lick out, pluck the grass with the lips'	<i>lasd</i> 'to suck, suck out the udder, lick out' <i>lasn</i> 'to sting, bite' <i>lasw</i> 'to eat greedily'	
<i>naṭb</i> 'to give a fillip on the ear'		<i>naṭṭ</i> 'to butt with the horns'	contrast: finitive fortative vs. iterative

Table 14 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>waθb</i> 'to leap, leap upon, attack, rush upon impetuously'		<i>waθʔ</i> 'to bruise or wound the flesh without injuring the bone' <i>waθr</i> 'to beat or tread soft' <i>waθɣ</i> 'to beat in one's skull' <i>waθm</i> 'to break, pound, grind, crush'	connective sense: 'to beat'

Table 15

\*g finitive fortative

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>ḏaʔj</i> 'to tear; kill'		<i>ḏaʔt</i> 'to throttle savagely' <i>ḏaʔt</i> 'to throttle, worry to death, slaughter, kill' <i>ḏaʔf</i> 'to die suddenly' <i>ḏaʔw</i> 'to wither'	connecting sense: 'to make perish'
<i>ratj</i> 'to lock, shut up'		<i>rutūʔ</i> 'to make a knot' <i>ratq</i> 'to mend, restore, stitch together, solder, cement, lock, shut' <i>ratw</i> 'to stitch together, mend, tie up'	connecting sense: 'to tie'
<i>zarj</i> 'to pierce with a lance'; <i>zarj</i> 'to snatch violently from a place, tear or pull out'	<i>zarr</i> 'to pierce with a lance'	<i>zarq</i> 'to thrust at with the lance' <i>zaʔb</i> 'to push away, drive away, chase' <i>zaʔj</i> 'to drive away, push away' (/j/ here from *g durative)	contrast: finitive fortative vs. andative connecting sense: 'to take away, send away'; contrast: finitive fortative vs. extendative (*b) and durative (*g)
<i>falj</i> 'to vanquish one's enemy'	<i>fall</i> 'to rout, put to flight, flee, run away'	<i>falt</i> 'to escape, get rid of' <i>falaʃ</i> 'to escape, get one's self out' <i>falw</i> 'to set out on a journey'	
<i>labj</i> 'to throw on the ground'		<i>labd</i> 'to duck' <i>labt</i> 'to throw on the ground'	connecting sense: 'to drop down'

# ORIGIN OF THIRD CONSONANTS

Table 15 (cont.)

Triliteral root	Simple form	Other related forms	Semantics
<i>lahj</i> 'to hit in the eye'		<i>lahb</i> 'to strike with sword, cut length-wise' <i>lahz</i> 'to set upon, press hard' <i>lahj</i> 'to beat' (/j/ here from *g durative)	connecting sense: 'to hit'

16. \*c non-finitive

17. \*n non-finitive

The consonant \*c (after Faber 1985), which falls together with \*s in Arabic, and the consonant \*n appear in third-consonant position in verbs denoting open-ended action. In some cases they remove the boundedness of the action of the simple root; in others they act as inceptives. This \*n would appear to be a direct cognate of the Agaw \*n of open-ended action, mentioned above. See tables 16 and 17.

Table 16

\*c non-finitive

Triliteral root	Simple form	Other related forms	Semantics
<i>šaus</i> 'to rub the teeth'		<i>šaus</i> 'to rub the teeth, rub, clean, wash' <i>šauf</i> 'to smooth, polish'	connecting sense: 'to rub'
<i>ḍafs</i> 'to gather thistles and give them to the camel'		<i>ḍafr</i> 'to throw food into the mouth of a beast of burden' <i>ḍafz</i> 'to force a morsel into one's mouth'	connecting sense: 'to give a bit of food to'
<i>ḍais</i> 'to begin to wither'		<i>ḍaiḥ</i> 'to be deserted' <i>ḍaiz</i> 'to wrong, oppress' <i>ḍair</i> 'to injure, hurt, harm' <i>ḍaiḥ</i> 'to perish, lose one's way, go astray' <i>ḍaim</i> 'to injure, wrong, deceive, oppress'	connecting sense: 'to go bad, become damaged, become ruined or useless'
<i>šals</i> 'to enjoy, eat, drink'		<i>šalf</i> 'to feed, drink much' <i>šalq</i> 'to browse leaves from high trees'	connecting sense: 'to eat up'

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Table 16 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>ʕalk</i> 'to chew and turn about in the mouth'	
<i>kars</i> 'to clean the stable'		<i>karʃ</i> 'to scrape the cheese'	connecting sense: 'to scrape out'
		<i>kard</i> 'to take the sperm out of the covered she-camel's womb'	
		<i>karf</i> 'to remove the sweepings'	
		<i>karw</i> 'to dig out the earth'	
<i>laḥs</i> 'to eat up the wool, lick, lap'		<i>laḥf</i> 'to lick'	connecting sense: 'to take a bite, take a swallow'
		<i>laḥm</i> 'to gnaw a bone'	
<i>lams</i> 'to touch, feel'	<i>lamm</i> 'to gather, amass'	<i>lamʔ</i> 'to set hand to, take all, steal'	connecting sense: 'to hold'
		<i>lamʃ</i> 'to pinch'	
		<i>lamk</i> 'to knead dough'	
		<i>lamw</i> 'to take all'	
<i>lams</i> 'to seek, inquire after'		<i>lamʔ</i> 'to cast one's look upon'	connecting sense: 'to look'
		<i>lamḥ</i> 'to look stealthily at, catch a glance; spy at'	
		<i>lamq</i> 'to look at'	
<i>mats</i> 'to try to pull out'	<i>matt</i> 'to pull rope out of the well, draw water'	<i>maṭḥ</i> 'to draw water from the well, pull out'	
		<i>matx</i> 'to pull out'	
		<i>math</i> 'to draw or pull up (the bucket out of the well)'	
		<i>matš</i> 'to separate by the fingers'	
<i>mals</i> 'to smooth, pacify, flatter, coax by stroking'		<i>malš</i> 'to feel, examine with the hand'	connecting sense: 'to brush the hand against'
		<i>malḏ</i> 'to rub on the hand'	
		<i>malq</i> 'to efface, blot out'	

# ORIGIN OF THIRD CONSONANTS

Table 17  
\*n non-finitive

Trilateral root	Simple form	Other related forms	Semantics
<i>baṭn</i> 'to enter, penetrate'	<i>baṭṭ</i> 'to cut open'	<i>baṭr</i> 'to split, cleave'	contrast: non-finitive ('penetrate') vs. diffusive
<i>rahn</i> 'to last, make last, restrain, be settled, fixed in a place'		<i>rahk</i> 'to remain, abide' <i>rahw</i> 'to be calm, calm [n.]'	connecting sense: 'to stay, be still'
<i>zaqn</i> 'to take up and carry'	<i>zaqq</i> 'to transport'	<i>zaqf</i> 'to snatch, seize quickly'	contrast: non-finitive vs. intensive (action)
<i>šaṣan</i> 'to dishevel'	<i>šaṣṣ</i> 'to spurt out, disperse and spread in all directions'	<i>šaṣb</i> 'to disperse, split, get separated' <i>šaṣaθ</i> 'to be dispersed, get into disorder'	
<i>ḍaḥn</i> 'to come and sit by'	<i>ḍaḥḥ</i> 'to press one another in eating or at the water'	<i>ḍaḥr</i> 'to plait, tie the hair together, twist a rope' <i>ḍaḥt</i> 'to tie together'	connecting sense: 'to put or come together'
<i>yaṣn</i> 'to hold out a branch to'		<i>yaṣb</i> 'to take by violence or unlawfully'	contrast: non-finitive vs. finitive fortative
<i>kafn</i> 'to spin wool'	<i>kaff</i> 'to double up and sew a hem, wrap up in bandages'	<i>kafʔ</i> 'to turn upside down, turn from one thing to another'	connecting sense: 'to bend, turn over or around'; contrast: non-finitive vs. concisive'
<i>lajn</i> 'to lick'	<i>lajlaj</i> 'to chew and turn about in the mouth'	<i>lajḏ</i> 'to eat, consume, graze off the first green food, lick out a vessel'	contrast: non-finitive vs. extendative fortative
<i>lajn</i> 'to beat down leaves and mingle them with oats or flour'		<i>lajf</i> 'to beat violently'	contrast: non-finitive vs. intensive (action); connecting sense: 'to beat'
<i>matn</i> 'to set out on a journey'		<i>matl</i> 'to shake, move'	connecting sense: 'to move'
<i>maṣn</i> 'to advance quickly and far, get the lead (race-horse)'	<i>maṣmaṣ</i> 'to dispatch one's work quickly'	<i>maṣj</i> 'to walk hurriedly, hasten' <i>maṣd</i> 'to travel over' <i>maṣl</i> 'to hasten, urge to haste'	connecting sense: 'to move off quickly'

17a.

\*n noun suffix (complement)

17b.

\*n modifier suffix

\*n in C<sub>3</sub> position also appears as a noun suffix, as it does widely in Cushitic; and it appears in several verbs of attributive implication. In the latter instances, like \*/ in such cases, it can be plausibly argued to have originally been an adjective

suffix, with the adjectives thus formed having been converted into verbs in Semitic. As for \**l*, the existence of an earlier Afroasiatic modifier suffix in \**n* is supported by the undoubted existence of such a suffix in Cushitic. See tables 17a and 17b.

Table 17a  
\**n* noun suffix (complement)

Trilateral root	Simple form	Other related forms	Semantics
<i>daqn</i> 'to hit on the beard'	<i>daqq</i> 'to grind, pound, beat out, thresh, knock, rap'	<i>daql</i> 'to strike on the mouth, nose, neck, or beard' <i>daqm</i> 'to break another's front teeth'	presumed earlier noun * <i>dḳn</i> 'blow (to the head?)'
<i>rašn</i> 'river-mouth'	<i>rašš</i> 'to sprinkle, shed, rain slightly'	<i>rašʔ</i> 'to drop young one' <i>rašah</i> 'to perspire, leak, ooze, trickle, filter, strain'	
<i>lišn</i> 'tongue'	<i>lass</i> 'to eat, lick out, pluck the grass with the lips'	<i>lasb</i> 'to bite' (and other forms, for which see table 14)	
<i>layān</i> 'tone, sound, voice, noise'; <i>layan</i> 'idle talk'	<i>laylay</i> 'to stammer'	<i>layb</i> 'to tell an untruth' (and other forms, for which see table 3a)	connecting sense: 'to talk'
<i>madan</i> 'duration, period, term, reach, range, to stretch, extend'	<i>madd</i> 'to stretch, extend, spread out, rise, grow'	<i>madx</i> 'to be great, large' (and other forms, for which see table 31)	connecting sense: 'to spread, expand, extend'
<i>wajn</i> 'blow, thrust [n.]'		<i>wajʔ</i> 'to beat, thrust; decapitate' (and other forms, for which see table 38:65)	connecting sense: 'to hit'

Table 17b  
\**n* modifier suffix

Trilateral root	Simple form	Other related forms	Semantics
<i>ʔafn</i> 'to exhaust all milk in the udder, have little milk'	<i>ʔafaf</i> 'a little, small quantities, trifle'	<i>ʔafk</i> 'to produce nothing for lack of rain' <i>ʔafal</i> 'to dry up (milk of a suckling woman)' <i>ʔufūl</i> 'to vanish, disappear (moon)'	connecting sense: 'to diminish'
<i>dajn</i> 'to be cloudy, dark, rainy'	<i>dajdaj</i> , <i>dujuj</i> 'pitch dark';	<i>dajm</i> 'to be dark' <i>dajw</i> 'to cover, wrap up;	

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Table 17b (cont.)

Triliteral root	Simple form	Other related forms	Semantics
	<i>dujuj</i> 'deep darkness'	cover with darkness'	
<i>wahn</i> 'to be weak, too weak'		<i>wahṭ</i> 'to be weak, faint' <i>wahal</i> 'to be weak, timid' <i>wahy</i> 'to be weak, brittle, frail, perishable'	connecting sense: 'to weaken'
<i>wadn</i> 'to wet, moisten, put into water'		<i>wadj</i> 'to bleed a horse at the jugular vein' ( <i>wadaj</i> 'jugular vein') <i>wadf</i> 'to melt and drip, melt; trickle, let the water out in drops' <i>wadq</i> 'to drip, drop'	connecting sense: 'to let leak'

18. \**b* extendative

19. \**ṣ* extendative

A second pattern of occurrence of \**b* is as C<sub>3</sub> in roots that had underlying biliteral forms with a finitive meaning, but that themselves denoted the equivalent open-ended action. The \**b* element in this kind of instance can be understood as deriving from an extension that was "disfinitive" in effect, or extendative. A second C<sub>3</sub> that appears to have had the same effect is \**ṣ*. See tables 18 and 19.

Table 18  
\**b* extendative

Triliteral root	Simple form	Other related forms	Semantics
<i>ʔadab</i> 'to wonder'	<i>ʔadd</i> 'to come upon suddenly'		'wonder' is the extended sense of 'be surprised' (by having come upon suddenly)
<i>ʔazab</i> 'to flow'	<i>ʔazz</i> 'to pour out'		
<i>zaʔb</i> 'to drink in long draughts'		<i>zaʔm</i> 'to swallow greedily'	contrast: extendative vs. fortative; connecting sense: 'to swallow'
<i>šaḏb</i> 'to draw off, peel, prune'	<i>šaḏḏ</i> 'to separate, sunder, set apart'	<i>šaḏw</i> 'to break'	
<i>qarab</i> 'to travel the night'	<i>qarr</i> 'to drink its fill at a	<i>qarz</i> 'to sting'	

Table 18 (cont.)

Triliteral root	Simple form	Other related forms	Semantics
through in order to get to water'	time'	<i>qarš</i> 'to gnaw at' (and other forms, for which see table 39:87)	
<i>habb</i> 'to cut off, pluck, cull'	<i>hadd</i> 'to break with a loud crack, pull down, demolish'	<i>hady</i> 'to break into pieces' (and other forms, for which see table 30)	extended action is indi- cated in second meaning; first meaning can be laid to * <i>b</i> finitive fortative (table 14)
<i>haqb</i> 'to rain continu- ously'		<i>haql</i> 'to flow abundantly in speeches and verses, abundant [adj.]' ( <i>ihdal</i> 'to rain abundantly')	contrast: extendative vs. */ modifier suffix
<i>haḏb</i> 'to cut off what is superfluous, prune, cut wood'	<i>haḏḏ</i> 'to cut, sever'	<i>haḏʔ</i> 'to cut off quickly' <i>haḏm</i> 'to cut off quickly'	

Table 19

\**z* extendative

Triliteral root	Simple form	Other related forms	Semantics
<i>raḥz</i> 'to make a hole in a spear or arrow to fix in the head'		<i>raḥb</i> 'to cut off' <i>raḥθ</i> 'to bite and take off some flesh' <i>raḥl</i> 'to pierce with a spear, strike with a sword'	connecting sense: 'to prick, pierce, cut into'
<i>šamz</i> 'to take away grad- ually and in small quantities'		<i>šamaṭ</i> 'to grasp, take away everything, pull (ear)' <i>šaml</i> 'to hold, contain, encompass'	connecting sense: 'to gather in the hands'
<i>lamz</i> 'to roll the tongue over, taste food'		<i>lamj</i> 'to eat with the sides of the mouth' <i>lamš</i> 'to dip the fingers into honey, etc., and lick it off'	connecting sense: 'to lap up'
<i>naḥz</i> 'to have an erec- tion'		<i>naḥš</i> 'to elevate'	connecting sense: 'to raise'
<i>waḥz</i> 'to announce future reward or punish- ment, warn, preach'		<i>waḥd</i> 'to promise, prom- ise good to, give hope for, inspire with fear of, threaten with'	contrast: extendative vs. durative; connecting sense: 'to call out'

# ORIGIN OF THIRD CONSONANTS

Table 19 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
<i>yaqaṣ</i> 'to be awake, awake'		<i>yaqn</i> 'to know for certain'	original sense: 'to be(come) aware of'
<i>wašṣ</i> 'to break loose a piece of bone'		<i>wašr</i> 'to saw, sharpen the teeth'	connecting sense: 'to slice'
		<i>wašq</i> 'to cut meat into long strips, pierce'	
		<i>wašm</i> 'to tattoo the skin'	

20.	<i>*p</i> iterative
21.	<i>*h</i> iterative
22.	<i>*g</i> durative
23.	<i>*k</i> durative
24.	<i>*d</i> durative
25.	<i>*t</i> durative

Six different consonants in third consonant position are associated with durational meaning in verbs. Two, *\*p* and *\*h*, are more often than not associated with repetitive action, although in a minority of instances the verbs they are part of now have a simpler durational implication. They can thus reasonably be reconstructed as having originally been iterative markers. The four other consonants, *\*g*, *\*k*, *\*d*, and *\*t*, sometimes belong to verbs of iterative connotation, but on the whole they go with verbs of a more generalized durative sense; hence their postulation as durative extensions. One C<sub>3</sub>, *\*d*, occurs in several instances in verbs of inchoative or stative implication. But it is unclear whether this outcome reflects some difference from the others in its original function. The *\*t* durative is an obvious cognate of the still widely productive Cushitic verb extension, *\*t* of extended action. See tables 20, 21, 22, 23, 24, and 25.

Table 20  
*\*p* iterative

Trilateral root	Simple form	Other related forms	Semantics
<i>jarf</i> 'to shovel or sweep away, scour, hew, hoe'	<i>jarr</i> 'to draw, drag, attract'	<i>jarm</i> 'to cut off, take away' (and other forms, for which see tables 8 and 24)	connecting sense: 'to remove'
<i>xarf</i> 'to cull or gather fruit'	<i>xarr</i> 'to split, cut'	<i>xarṭ</i> 'to shell, strip off bark, leaves, berries'	

Table 20 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
		<i>xarʕ</i> 'to split, break' (and other forms, for which see table 38:11)	
<i>qaʕf</i> 'to cull pluck, gather'	<i>qaʕʔ</i> 'to cut'	<i>qaʕʕ</i> 'to cut, cut off, lop, break off, tear off, sever' <i>qaʕl</i> 'to cut off' <i>qaʕm</i> 'to cut off'	
<i>naʕf</i> 'to drop, drip, trickle'		<i>naʕl</i> 'to press (wine, etc.), wash with an aromatic decoction'	contrast: iterative vs. finitive (connecting sense: 'to flow')
<i>wajf</i> 'to beat, throb'		<i>wajʔ</i> 'to beat, thrust' (and other forms, for which see table 38:65) connecting sense: 'to hit'	connecting sense: 'to hit'
<i>wadʕ</i> 'to melt and drip, trickle, let the water out in drops'		<i>wadʕ</i> 'to bleed a horse at the jugular vein' ( <i>wadaʕ</i> 'jugular vein') <i>wadq</i> 'to drip, drop' <i>wadn</i> 'to wet, moisten, put in water'	connecting sense: 'to leak' or 'to let leak'

Table 21

\*ḥ iterative

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>badḥ</i> 'to cut down, fell, cleave, beat'	<i>badd</i> 'to separate, remove, keep separate'	<i>bady</i> 'to crack' (nuts and almonds)	contrast: iterative vs. intensive (effect)
<i>rašaḥ</i> 'to perspire, leak, ooze; trickle, filter, strain'	<i>rašš</i> 'to sprinkle, shed, rain slightly'	<i>rašʔ</i> 'to drop young'	contrast: iterative vs. concisive
<i>šaḍḥ</i> 'to cry out, crow, shout, sing, chant'	<i>šaḍīd</i> 'to cry out, shout'		
<i>ladḥ</i> 'to beat slightly with the hand, slap'		<i>lads</i> 'to slap' <i>ladm</i> 'to slap the face, beat woman's face, beat flat'	connecting sense: 'to rap (with the hand), pat'
<i>lamḥ</i> 'to look stealthily at, spy at'		<i>lamʔ</i> 'to cast one's look upon' (and other forms, for which see table 16)	connecting sense: 'to look'
<i>mašḥ</i> 'to pass the hand'	<i>mass</i> 'to touch slightly'	<i>mašʔ</i> 'to press with fin-	

# ORIGIN OF THIRD CONSONANTS

Table 21 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
over anything, wipe, rub in, salve, anoint, feel, touch, stroke'		gers to empty, wring out' (and other forms, for which see table 38:54)	
<i>nabḥ</i> 'to bark, bellow, hiss'	<i>nabb</i> 'to bleat from rut'	<i>nabr</i> 'to shout to, drive away by cries or shouts' (and other forms, for which see table 39:95)	
<i>watḥ</i> 'to give but little, dole'		<i>watš</i> 'little, few'	

Table 22

\*g durative

Trilateral root	Simple form	Other related forms	Semantics
<i>rahj</i> 'to waver to and fro, flicker'		<i>rahz</i> 'to move violently (especially in co- ition)' <i>rahal</i> 'to be soft and tremulous'	connecting sense: 'to wa- ver'
<i>šaṯj</i> 'to drink in small quantities but long and much'	<i>šaṯṯ</i> 'to eat up or destroy the wool (moth), bite, bite of a snake'		
<i>šaḍj</i> 'to drink'		<i>šaḍm</i> 'to seize with the teeth, bite, chew violently'	contrast: durative vs. for- tative
<i>ḡamj</i> 'to sip'		<i>ḡamaṯ</i> 'to sip greedily'	contrast: durative vs. du- rative intensive
<i>laḍj</i> 'to drink in sips'	<i>laḍāḍ</i> 'to find sweet, agreeable, delight- ful, eat and drink well'	<i>laḍm</i> 'to please'	connecting sense: 'to taste, find tasty'
<i>lašj</i> 'to burn'	<i>lašš</i> 'to shine'	<i>lašṯ</i> 'to brand or cauter- ize on throat'	contrast: durative vs. du- rative intensive
<i>marj</i> 'to send an animal to pasture'	<i>marr</i> 'to pass, pass by, pass away, depart, go away'	<i>mart</i> 'to drive away' <i>mary</i> 'to take out, pull out'	
<i>marj</i> 'to allow to flow freely and mingle'		<i>marṯ</i> 'to wet, moisten, soften' <i>mard</i> 'to moisten and soften'	connecting sense: 'to be wet'

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Table 22 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
<i>lahj</i> 'to beat'		<i>marʔ</i> 'to secrete' <i>lahb</i> 'to strike with the sword, cut length-wise' <i>lahz</i> 'to set upon, press hard'	connecting sense: 'to strike'

Table 23

\*k durative

Trilateral root	Simple form	Other related forms	Semantics
<i>rahk</i> 'to remain, abide'		<i>rahn</i> 'to restrain, be settled, fixed in a place, last, make to last' <i>rahw</i> 'to be calm, calm'	connecting sense: 'to stay, be still'
<i>zark</i> 'to press, throng'	<i>zarr</i> 'to chase'	<i>zarʔ</i> 'to spring upon, advance against, speed along'	contrast: durative vs. intensive (manner)
<i>ḍahk</i> 'to lighten' (give off flashes of lighting)	<i>ḍiḥḥ</i> 'sun, sunlight'	<i>ḍahw</i> 'to be clear, visible in the sunlight'	contrast: durative vs. inchoative (become lit up by sun)
<i>ʕalk</i> 'to chew and turn about in the mouth, chew the bit, gnash the teeth'		<i>ʕals</i> 'to enjoy, eat, drink' <i>ʕalq</i> 'to browse leaves from high trees' <i>ʕalf</i> 'to feed, drink much'	connecting sense: 'to eat up'
<i>labk</i> 'to mix'		<i>labs</i> 'to mingle'	contrast: durative vs. non-finitive
<i>lamk</i> 'to knead dough'	<i>lamm</i> 'to gather, amass'	<i>lamʔ</i> 'to set hand to' <i>lams</i> 'to pinch' <i>lams</i> 'to touch, feel' <i>lamw</i> 'to take all'	connecting sense: 'to hold'
<i>matk</i> 'to cut, cut in pieces'		<i>matḥ</i> 'to cut off' <i>matr</i> 'to cut off'	connecting sense: 'to cut'
<i>mahk</i> 'to pound minutely'		<i>mahn</i> 'to beat'	contrast: durative vs. non-finitive; connecting sense: 'to hit'

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Table 24  
\*d durative

Trilateral root	Simple form	Other related forms	Semantics
<i>buʕd</i> 'to be far, distant'		<i>baʕj</i> 'to split, slit, furrow, break into pieces' <i>baʕk</i> 'to strike arm or leg with the sword' <i>baʕq</i> 'to split'	connecting sense: 'to put or take apart'
<i>jard</i> 'to strip, peel, shave'		<i>jarh</i> 'to wound' <i>jarz</i> 'to cut off, lop' <i>jars</i> 'to rub, comb, peel, pare' <i>jarf</i> 'to take up and remove, shovel or sweep away, scour, hew, hoe' <i>jarm</i> 'to cut off, take away'	connecting sense: 'to remove the covering layer'
<i>ḥaʕd</i> 'to mow, reap'	<i>ḥaʕʕ</i> 'to shave, rub off the hair, strip'		
<i>sabd</i> 'to shave off the hair'	<i>sabb</i> 'to cut, wound'	<i>sabt</i> 'to cut off, behead, shave' (and other forms, for which see table 11)	
<i>ḍamad</i> 'to dress a wound, twist a bandage round'	<i>ḍamm</i> 'to gather, hoard, join, bring near, concentrate, gird'		
<i>lasd</i> 'to suck, suck out the udder, lick out'	<i>lass</i> 'to eat, lick out, pluck the grass with the lips'	<i>lasb</i> 'to bite' (and other forms, for which see tables 14 and 17a)	
<i>maʕd</i> 'to travel over'	<i>maʕmaʕ</i> 'to dispatch one's work quickly'	<i>maʕj</i> 'to walk hurriedly, hasten' (and other forms, for which see table 17)	
<i>mayd</i> 'to grow long and luxuriant, grow fat'		<i>mayt</i> 'to stretch by pulling'	contrast: durative vs. durative intensive
<i>najd</i> 'to drip with perspiration'	<i>najj</i> 'to bleed, suppurate'	<i>najx</i> 'to bring wind and rain' <i>najl</i> 'to abound with springs of water' <i>najw</i> 'to ease the bowels'	connecting sense: 'to leak, seep, run out'
<i>waʕd</i> 'to tread down, tread under foot, trample down, tread the ground firm'		<i>waʕʕ</i> 'to tread upon' <i>waʕs</i> 'to tread upon with a shoe or boot' <i>waʕm</i> 'to tread upon, trample'	connecting sense: 'to tread'

Table 25  
\*t durative

Trilateral root	Simple form	Other related forms	Semantics
<i>bakt</i> 'to beat, strike'	<i>bakk</i> 'to tear, break into pieces, break one's head'	<i>baks</i> 'to overcome, vanquish an enemy' <i>bakʕ</i> 'to beat violently and repeatedly in different places'	connecting sense: 'to hit hard'
<i>θabat</i> 'to stand firm and permanently, persist'	<i>θabāb</i> 'to sit firm'	<i>θabar</i> 'to keep on from a thing, retain, prevent' <i>θabʔ</i> 'to prevent, delay'	connecting sense: 'to stop'
<i>ħalt</i> 'to shave off, pull out'	<i>ħall</i> 'to loosen, unfold'	<i>ħalz</i> 'to remove the hair from a skin, the bark from wood, etc.' <i>ħalš</i> 'to reap with a sickle' <i>ħalq</i> 'to shave, shear'	connecting sense: 'to take loose'
<i>rabt</i> 'to bring up, educate'		<i>rabʔ</i> 'to lift up, elevate, be high, sublime' <i>rabl</i> 'to be numerous, multiply' <i>rabw</i> 'to grow up, be brought up'	connecting sense: 'to raise'
<i>raft</i> 'to break into small pieces'		<i>rafz</i> 'to beat, throb' <i>rafs</i> 'to kick'	connecting sense: 'to knock'
<i>sabt</i> 'to rest, sleep, keep the Sabbath, make holiday, be idle'		<i>sabx</i> 'to be at leisure, be idle, sleep deeply'	contrast: continuative vs. extendative fortative ('to sleep <i>deeply</i> ')
<i>ḏaht</i> 'to stamp anything into the ground'		<i>ḏahd</i> 'to do violence to' <i>ḏahz</i> 'to tread violently under foot'	connecting sense: 'to step hard on'
<i>laft</i> 'to turn, roll about in the mouth, fold'	<i>laff</i> 'to wrap up, envelop, roll or fold up'	<i>lafʕ</i> 'to cover the head, veil' <i>lafq</i> 'to sew the two ends of a cloth together' (requires folding the ends together)	
<i>naʕt</i> 'to describe, qualify'		<i>naʕb</i> 'to croak and augur evil, crow, call out hour for prayer' <i>naʕār</i> 'to cry out, scream, utter a rough nasal sound, bellow' <i>naʕš</i> 'woeful cry or howl'	connecting sense: 'to speak out, cry'

Table 25 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		<i>naʕq</i> 'to croak, bleat, call to'	
<i>nakt</i> 'to poke the ground with a stick or finger, stir up the ground with a piece of wood'		<i>nakz</i> 'to prick with anything pointed, goad'	contrast: durative vs. intensive (manner); connecting sense: 'to poke'

26. \*ʔ concisive  
 27. \*x precipitive

Two consonants in C<sub>3</sub> position recurrently appear in verbs of counter-durative implication. The \*ʔ has been called "concisive" because it is repeatedly associated with actions of more concise scope than those of the underlying biconsonantal root. It tends commonly to go with an action of shorter duration than that of the biconsonantal, but this action can also often have a more narrowly focused or specialized locus of operation. Sometimes an intensifying effect also appears, at least in the modern meaning of a root containing \*ʔ as its C<sub>3</sub>. The second item, \*x, also occurs with shortened duration of an action. A distinctive feature of roots with this kind of \*x in the third-consonant slot is the implied abruptness that is often present in the action; hence the name "precipitive" for such \*x. (For \*x in a different meaning, see table 36.) See tables 26 and 27.

Table 26  
 \*ʔ concisive

Trilateral root	Simple form	Other related forms	Semantics
<i>jazʔ</i> 'to take a part of, divide'	<i>jazz</i> 'to shear, shave, cut, mow, reap'	<i>jazr</i> 'to cut, cut off' <i>jazʕ</i> 'to cut off' <i>jazl</i> 'to cut, cut through, cut off, cut asunder' <i>jazm</i> 'to cut off, lop, break off'	
<i>rabʔ</i> 'to lift up, elevate'	<i>rabb</i> 'to feed, nourish, bring up'	<i>rabt</i> 'to bring up, educate' <i>rabl</i> 'to be numerous, multiply' <i>rabw</i> 'to grow up, be brought up'	connecting sense: 'to raise, cause to move upward'; see table 39:75 for further examples of this set of roots

Table 26 (cont.)

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>raṣʔ</i> 'to drop young'	<i>raṣṣ</i> 'to sprinkle, shed, rain slightly'	<i>raṣaḥ</i> 'to perspire, leak, ooze, trickle, filter, strain'	contrast: concisive vs. iterative
<i>fatʔ</i> 'to break'	<i>fatt</i> 'to break with the fingers, break into crumbs, crumble'	<i>faty</i> 'to tread to pieces, crush under foot' <i>fatq</i> 'to split, break off, break loose, rip open' <i>fath</i> 'to open'	
<i>kasʔ</i> 'to strike with the sword'	<i>kass</i> 'to grind or pound to powder'	<i>kash</i> 'to beat, flog, punish' (and other forms, for which see table 38:45)	contrast: concisive vs. iterative (connecting sense 'to hit hard')
<i>kafʔ</i> 'to turn upside down, turn from one thing to another'	<i>kaff</i> 'to double up and sew a hem'	<i>kafn</i> 'to spin wool'	connecting sense: 'to turn, bend, fold'
<i>lamʔ</i> 'to set hand to'	<i>lamm</i> 'to gather, amass'	<i>lamṣ</i> 'to pinch' (and other forms, for which see tables 3, 9, 16, and 23)	connecting sense: 'to hold'

Table 27

\*x *precipitive*

<i>Triliteral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>ʔafx</i> 'to hit on the crown of the head'		<i>ʔafar</i> 'to attack, drive away'	contrast: precipitive vs. diffusive
<i>bazz</i> 'to take merchandise without weighing or measuring'	<i>bazz</i> 'to capture, rob, plunder'	<i>bazm</i> 'to carry a burden for a long time, rob'	contrast: precipitive vs. fortative; connecting sense: 'to carry off'
<i>jalx</i> 'to cut off a piece of skin'		<i>jald</i> 'to skin, flay' <i>jalt</i> 'to shave, skin, flay' <i>julūṣ</i> 'to be naked, strip' <i>jalf</i> 'to tear, scrape or scratch off, peel, shell' <i>jalh</i> 'to remove, uncover'	connecting sense: 'to cut off'
<i>rabāx</i> 'to faint during coition'	<i>rabb</i> 'to abide'	<i>rubūd</i> 'to stop, stay, remain' <i>rabṣ</i> 'to stay, remain, abide, stop, wait for'	connecting sense: 'to stop'

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Table 27 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
<i>fasx</i> 'to separate'		<i>rabṣ</i> 'to watch an opportunity, wait for'	connecting sense: 'to move apart'
		<i>fash</i> 'to be wide, spacious, make room for'	
		<i>fasʔ</i> 'to tear'	
		<i>fasl</i> 'to wean a child'	
		<i>fisq</i> 'to swerve from the commandments of God, come out of the shell (ripe date)'	
<i>matx</i> 'to pull out'	<i>matt</i> 'to pull rope out of well, draw water, stretch'	<i>matʔ</i> 'to stretch'	connecting sense: 'to pull'
		<i>math</i> 'to draw water from the well, pull out, be long'	
		<i>mats</i> 'to try to pull out'	
		<i>mats̥</i> 'to separate by the fingers'	
		<i>matr</i> 'to stretch'	
		<i>math</i> 'to draw or pull up (the bucket out of the well)'	
		<i>mašt</i> 'to milk the whole of the milk, press the pus out of a wound, take the sperm out of a camel's uterus'	
<i>maṣx</i> 'to pull out, take out, take off'		<i>maṣr</i> 'to milk with the fingertips'	connecting sense: 'to draw out, draw off'
		<i>maṣṭ</i> 'to wring out washed linen'	
		<i>maṭḥ</i> 'to beat with the hand, slap'	
<i>maṭx</i> 'to slap'		<i>maṭs</i> 'to box the ears'	connecting sense: 'to hit with flat of hand' (contrast: precipitive vs. iterative and fortative)

28. \**p* intensive (of manner)  
 29. \**z* intensive (of manner)  
 30. \**γ* intensive (of effect)  
 31. \**k* intensive (of effect)  
 32. \**t* durative intensive

Several consonants are recurrently linked in C<sub>3</sub> position with intensification of the action of the verb. Two, \**p* and \**z*, generally go with the intensifying of the manner in which the action is carried out. In contrast, two others, \**γ* and \**k*, commonly accompany an intensification of the work carried out by the action. (\**p*, \**γ*, and \**k* each have another C<sub>3</sub> meaning as well, for which see respectively tables 20, 5, and 6.) A fifth consonant, \**t*, marks verbs with actions that have both duration and intensity. See tables 28, 29, 30, 31, and 32.

Table 28

\**p* intensive (of manner)

Triliteral root	Simple form	Other related forms	Semantics
<i>dalf</i> 'to walk heavily as if with feet tied'	<i>dildāl</i> 'to swing the head and arms in walking'	<i>dalīθ</i> 'to walk with short steps' <i>dalḥ</i> 'to walk bending under a burden with short steps' <i>dalḏ</i> 'to run swiftly past'	connecting sense: 'to walk'
<i>rajj</i> 'to shake, tremble, be violently moved, shaken'	<i>rajj</i> 'to shake, tremble, waver, be agitated'		
<i>zarf</i> 'to spring upon'	<i>zarr</i> 'to chase'	<i>zark</i> 'to press, throng'	contrast: intensive vs. durative
<i>zaʕf</i> 'to kill on the spot'		<i>zaʕt</i> 'to throttle, strangle'	contrast: intensive vs. durative intensive
<i>zaqq</i> 'to snatch, seize quickly'	<i>zaqq</i> 'to transport'	<i>zaqn</i> 'to take up and carry'	contrast: intensive vs. non-finitive (as inceptive)
<i>šaḥaf</i> 'to skin, flay'		<i>šaḥab</i> 'to scrape off the ground with a shovel' <i>šaḥḏ</i> 'to sharpen, whet, grind'	connecting sense: 'to scrape off'
<i>šaʕaf</i> 'to enflame, mad-den (love)'	<i>šaʕf</i> 'sunbeam'; <i>šaʕšaʕ</i> 'to shine, sparkle'	<i>šaʕl</i> 'to light a fire, kindle'	contrast: intensive vs. finitive
<i>laxf</i> 'to beat violently'		<i>laxm</i> 'to strike on the face'	contrast: intensive vs. fortative
<i>lajf</i> 'to beat violently'		<i>lajn</i> 'to beat down leaves'	contrast: intensive vs.

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Table 28 (cont.)

Triliteral root	Simple form	Other related forms	Semantics
<i>nazf</i> 'to exhaust a well entirely, lose a great deal of blood'	<i>nazz</i> 'to exude water, abound in springs, leak'	and mingle them with oats and flour' <i>nazh</i> 'to nearly exhaust a well' (i.e., because of drawing water repeatedly)	non-finitive; connecting sense: 'to beat' contrast: intensive vs. iterative

Table 29

\*z intensive (of manner)

Triliteral root	Simple form	Other related forms	Semantics
<i>ʔalz</i> 'to adhere firmly'		<i>ʔalb</i> 'to assemble, gather together from all sides' <i>ʔalf</i> 'to unite, establish friendship, compose a book'	connecting sense: 'to put together'
<i>bahz</i> 'to push back violently'		<i>baht</i> 'to surprise and seize' <i>bahd</i> 'to molest, cause difficulty' <i>bahr</i> 'to importune, molest, overburden' <i>bahz</i> 'to molest, overwhelm (work), overburden'	connecting sense: 'to bother, disturb'
<i>jaʔz</i> 'a fit of suffocation'		<i>jaʔð</i> 'to drink without sipping or pausing' <i>jaʔʕ</i> 'to drink' <i>jaʔy</i> 'to bite upon'	connecting sense: 'to gulp' (?)
<i>rahz</i> 'to move violently (especially in co-ition)'		<i>rahj</i> 'to waver to and fro' <i>rahal</i> 'to be soft and tremulous'	connecting sense: 'to waver'
<i>ɖafz</i> 'to force a morsel into one's mouth'		<i>ɖafir</i> 'to throw food into the mouth of a beast of burden' <i>ɖafs</i> 'to gather thistles and give them to a camel'	connecting sense: 'to give a bit of food to'
<i>ɖahz</i> 'to tread violently under foot'		<i>ɖaht</i> 'to stamp anything into the ground' <i>ɖahd</i> 'to do violence to, treat unjustly and	connecting sense: 'to step hard on'

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Table 29 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
		tyrannically, persecute'	
<i>tanʒ</i> 'to mock at, ridicule, taunt, scoff'		<i>tanʔ</i> 'to be ashamed' <i>tanaf</i> 'to be suspected'	connecting sense: 'to do something shameful or wrong'
<i>ʒarʒ</i> 'to tear out violently'	<i>ʒurr</i> 'to suffer from falling out of hair' ( <i>ʒarr</i> 'to be scabrous, mangy'); <i>ʒarʒar</i> 'to uncork, pull out an eye'	<i>ʒarab</i> 'to separate, put by, put aside' <i>ʒarθ</i> 'to remove' <i>ʒard</i> 'to throw or fling far' connecting sense: 'to take out'	
<i>kanʒ</i> 'to bury in the ground, dig in, put into the purse, pocket, push into the ground (lance)'	<i>kann</i> 'to cover, veil, keep concealed, secret'	<i>kunūs</i> 'to retire to its lair' <i>kanf</i> 'to surround with a hedge or fence, keep enclosed in it'	
<i>labʒ</i> 'to eat hurriedly and greedily, swallow quickly'	<i>lablab</i> 'to lick the newborn tenderly'	<i>labn</i> 'to eat much' <i>laby</i> 'to eat much'	
<i>naʒʒ</i> 'to rise high, rise from a place'		<i>naʒʔ</i> 'to grow, grow up' <i>naʒr</i> 'to spread out, unfold or unroll, put forth leaves, grass to sprout forth'	connecting sense: 'to rise'

Table 30

\*γ intensive (of effect)

Trilateral root	Simple form	Other related forms	Semantics
<i>baɖʒ</i> 'to crack nuts and almonds'	<i>badd</i> 'to separate, remove, keep separate'	<i>baɖh</i> 'to cut down, fell, cleave'	contrast: intensive (effect) vs. iterative
<i>θamy</i> 'to dye deep red, dip the head repeatedly into henna'		<i>θamʔ</i> 'to dye the beard with henna'	contrast: intensive (effect) vs. concisive
<i>ʃalʒ</i> 'to break one's skull'	<i>ʃall</i> 'to drive away camels, drive away'	<i>ʃalh</i> 'to undress, strip' <i>ʃalq</i> 'to split lengthwise' <i>ʃalɿ</i> 'knife' (< durative intensive 'to cut apart')	connecting sense: 'to separate, put apart'
<i>fadʒ</i> 'to break, smash'	<i>fadd</i> 'to trample'	<i>fadʃ</i> 'to shatter' <i>fadx</i> 'to shatter'	

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Table 30 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>nasʔ</i> 'to hurt by words, slander'	<i>nass</i> 'to call to camels'	<i>nasʔ</i> 'to call to camels' <i>nasab</i> 'to quote the pedigree of a person, ascribe, refer to, reproach with' <i>nasj</i> 'to compose artificial speeches, make verses'	
<i>hady</i> 'to break into pieces'	<i>hadd</i> 'to break with a loud crack, pull down, demolish'	<i>hadb</i> 'to cut off, pluck, cull' <i>hadk</i> 'to pull down, demolish' <i>hadm</i> 'to pull down, demolish, level with the ground'	
<i>waθy</i> 'to beat in one's skull'		<i>waθʔ</i> 'to bruise or wound the flesh without injuring the bone' (and other forms, for which see table 14)	connecting sense: 'to beat'

Table 31

\**k* intensive (of effect)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>baθq</i> 'to overflow and break the banks, overflow with tears'		<i>baθw</i> 'to sweat, perspire'	connecting sense: 'to seep out'
<i>barq</i> 'to flash, lighten, shine, glitter, be brilliant; lightning'		<i>barāx</i> 'clear, distinct' <i>barah</i> 'to have a white body' <i>baraj</i> 'to have eyes the white of which is visible all around the black'	connecting sense: 'to be light, bright'
<i>daʕq</i> 'to trample upon'	<i>daʕdaʕ</i> 'to run slowly and with short steps to and fro'	<i>daʕθ</i> 'to stir up dust' <i>daʕs</i> 'to tread under foot' <i>daʕs</i> 'to lift up foot'	connecting sense: 'to step'
<i>dasaq</i> 'to be full to overflowing'	<i>dass</i> 'to hide one thing beneath another'	<i>dasr</i> 'to pierce' <i>dasʕ</i> 'to fill, stop' <i>dasm</i> 'to stop up, cork'	connecting sense: 'to stuff, stick into'

Table 31 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>salq</i> 'to pierce with a lance'		<i>salk</i> 'to cause to enter, put into'	contrast: intensive vs. finitive
<i>safq</i> 'to clap'		<i>safʕ</i> 'to cuff, box the ear'	
<i>ɣamaq</i> 'to be very moist, wet'		<i>ɣamt</i> 'to dip into the water'	connecting sense: 'to wet'
		<i>ɣams</i> 'to dip into water, immerse, wet'	
<i>fašq</i> 'to break'		<i>fašh</i> 'to open the legs, deviate from the right way'	connecting sense: 'to move apart, spread'
		<i>fašw</i> 'to spread, become public'	
<i>fatq</i> 'to split, break off, break loose, rip open'	<i>fatt</i> 'to break with the fingers, break into crumbs, crumble'	<i>fatʔ</i> 'to break'	
		<i>fatɣ</i> 'to tread to pieces, crush under foot'	
		<i>fath</i> 'to open'	
<i>lahq</i> 'to be very white, shine very brightly'	<i>lahh</i> 'to smooth the hair and make it glossy'	<i>lahb</i> 'to flame, blaze'	contrast: intensive vs. extensive; connecting sense: 'to glow, shine'
<i>madq</i> 'to break to pieces' (i.e., <i>spread out</i> in many fragments)	<i>madd</i> 'to stretch, extend, spread out, rise, grow, prolong the life'	<i>madx</i> 'to be great, large'	connecting sense: 'to spread, expand, extend'
		<i>madḥ</i> 'to praise' (i.e., to attribute greatness to)	
		<i>madr</i> 'to coat with mud' (i.e., to <i>spread</i> mud on)	
		<i>madan</i> 'duration, period, term, reach, range, to stretch, extend'	
		<i>madar</i> 'to have big, protruding belly'	
<i>malq</i> 'to efface, blot out' (i.e., rub completely away)		<i>mals</i> 'to smooth, pacify, coax by stroking'	connecting sense: 'to brush the hand against'
		<i>malš</i> 'to feel, examine with the hand'	
		<i>malð</i> 'to rub on the hand'	

# ORIGIN OF THIRD CONSONANTS

Table 32  
\*ṭ durative intensive

Triliteral root	Simple form	Other related forms	Semantics
ziʔaṭ 'to talk much and boisterously'		zaʔf 'to urge to speed' zaʔr 'to roar, shriek' zaʔm 'to impart certain news on hearsay'	connecting sense: 'to speak up'
zaʕṭ 'to bray'		zaʕj 'to cry out' zaʕq 'to cry out, cry to or call out to' zaʕm 'to say, pretend, assert, talk over, give one's opinion'	connecting sense: 'to call'
zaʕṭ 'to throttle, strangle'		zaʕf 'to kill on the spot, strike dead'	contrast: durative intensive vs. intensive
samṭ 'to hang, suspend'		samk 'to raise to great height' sumūq 'to be high-grown'	
ḍaʔṭ 'to press, press against, push'		ḍaʔn 'to lean toward'	connecting sense: 'to come into contact'; contrast: durative intensive vs. non-finitive
qaḥṭ 'to beat violently'		qaḥz 'to cudgel' qaḥf 'to beat on the skull, break one's skull, wound at the head'	connecting sense: 'to hit (with a stick)'
laʔṭ 'to be clamorous, noisy'	laʔlay 'to stammer'	laʔb 'to tell an untruth' laʔan 'idle talk' laʔm 'to tell uncertain things abroad' laʔw 'to speak, indulge in idle talk, idle talk, talk, conversation, topic of conversation'	connecting sense: 'to talk'
laḥṭ 'to swallow greedily'		laḥab 'to suffer from intense thirst' laḥθ 'to let the tongue hang out from thirst or tiredness' laḥs 'to lick' laḥm 'to swallow at one gulp'	connecting sense: 'to swallow'

Table 32 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
<i>mayt</i> 'to stretch by pulling'		<i>mayd</i> 'to grow long and luxuriant, grow fat'	contrast: durative intensive vs. durative
<i>malṭ</i> 'to coat with mud or mortar'		<i>malš</i> 'to drop excrement'	contrast: durative intensive vs. focative

33. \**s* fortative

34. \**m* fortative

Two further consonants, \**s* and \**m*, also recur as third consonants in verbs that convey some kind of intensified action. On the whole, the intensification implied in these cases *tends* to be of a lesser degree than that associated with 28–32; hence they have been called fortatives rather than intensives. The manner/work distinction noted for 28–31 seems also not present in \**s* and \**m*. The latter marker, \**m*, is plausibly relatable to the Cushitic verb extension \**m* intransitive. The stative and ‘‘passive’’ attributes of PC \**m* in Southern and Eastern Cushitic respectively indicate that \**m* may have originated in pre-Proto-Cushitic as a durative marker of some kind. Since duration adds to the amount of an action, a meaning shift toward intensive (as for \**m* here in Semitic) would seem well motivated. See tables 33 and 34.

Table 33

\**s* fortative

Trilateral root	Simple form	Other related forms	Semantics
<i>bajs</i> 'to open a wound and let flow out the water'	<i>bajj</i> 'to prick open (a tumor), pierce'	<i>bajar</i> 'to be afflicted with a rupture of the navel'	contrast: fortative vs. diffusive
<i>taṣṣ</i> 'to perish, fall on one's face, ruin, stumble and fall'	<i>taṣṣ</i> 'to be weak, languid'	<i>taṣab</i> 'to be tired' <i>taṣaš</i> 'to feel pain in the sinews of the foot from walking'	
<i>raks</i> 'to overturn'	<i>rakk</i> 'to wind round one's neck'	<i>rukūṣ</i> 'to bow to the ground'	connecting sense: 'to bend, turn'
<i>ṣaks</i> 'to turn topsy-turvy, reverse the order'		<i>ṣakf</i> 'to bend, curve, fold' <i>ṣakl</i> 'to bind, tie up' <i>ṣakm</i> 'to wrap up in a cloth, make a bale, fasten with a	connecting sense: 'to fold over'

# ORIGIN OF THIRD CONSONANTS

Table 33 (cont.)

Triliteral root	Simple form	Other related forms	Semantics
		string, cord' ʕakw 'to tie a horse's tail into a knot'	
ɣaʕs 'to immerse, be im- mersed, plunge, dive'	ɣaʕt 'to dip into the water'	ɣaʕw 'to inundate'	
kaus 'to be thrown head over heels, throw a somersault'		kaur 'to wind in spiral form, roll along'	contrast: fortative vs. dif- fusive
laqs 'to catch with the mouth'	laqq 'to lick, lap' laqlaq 'to move the jaws tremulously and put out tongue (snake), smack with the tongue'	laqʕ 'to suck' laqf 'to catch, catch and swallow' laqm 'to swallow, de- vour, eat hastily'	
maʕas 'to gape, be large (wound)'		maʕd 'to become juicy and begin to grow' maʕw 'to widen, stretch, lengthen out'	connecting sense: 'to widen, grow large'
maʕs 'to box the ears'		maʕh 'to beat with the hand, slap' maʕx 'to slap'	connecting sense: 'to hit with the flat of the hand'
maʕs 'to rub vigorously'		maʕθ 'to rub, knead' maʕš 'to rub slightly' maʕk 'to rub, roll on the ground'	connecting sense: 'to rub'
wajs 'to be seized with fear, take fright at'		wajl 'to surpass in fear'	connecting sense: 'to fear'; contrast: fortative vs. finitive

Table 34

\*mfortative

Triliteral root	Simple form	Other related forms	Semantics
jaʕm 'to cut off, maim, mutilate'	jaʕʕ 'to cut off at the root, pluck'	jaʕr 'to lop, cut off, up- root' jaʕʕ 'to cut off' jaʕf 'to cut off'	
darm 'to run fast and with short steps, step gracefully'		darb 'road' durūj 'to step, step on- ward, walk' daraq 'to hurry, hasten' darak 'to follow, pursue'	connecting sense: 'to step'

Table 34 (cont.)

Trilateral root	Simple form	Other related forms	Semantics
<i>daym</i> 'to overpower, overwhelm'		<i>dayr</i> 'to fall upon an enemy in a disorderly manner, rob by force'	connecting sense: 'to attack'
<i>zaʔm</i> 'to swallow greedily'		<i>dayš</i> 'to attack'	
<i>ʔaʕm</i> 'to eat, consume food, be satiated'	<i>ʔaʕʕ</i> 'to lick'	<i>zaʔb</i> 'to drink in long draughts'	contrast: fortative vs. extendative
<i>ʕaðm</i> 'to seize with the teeth, bite, chew violently'		<i>ʕaðj</i> 'to drink'	contrast: fortative vs. durative
<i>quḥūm</i> 'to rush heedlessly into'		<i>qaḥz</i> 'to jump about, be restless, agitated'	connecting sense: 'to move rapidly'
		<i>qaḥs</i> 'to pass by rapidly, skip, jump, run'	
<i>laḥm</i> 'to gnaw a bone'		<i>laḥs</i> 'to eat up the wool, lick, lap'	connecting sense: 'to take a bite, take a swallow'
		<i>laḥf</i> 'to lick'	
<i>kašm</i> 'to cut off the nose'		<i>kašr</i> 'to uncover, bare, show the teeth'	connecting sense: 'to take off'
		<i>kašt</i> 'to take off (cover or veil), skin, flay, skim'	
		<i>kašf</i> 'to uncover, bare, unveil, reveal'	
<i>hašm</i> 'to break, crush'	<i>hašš</i> 'to beat off with a stick'		
<i>wašm</i> 'to tattoo the skin'		<i>wašr</i> 'to saw, sharpen the teeth'	connecting sense: 'to slit'
		<i>wašz</i> 'to break loose a piece of the bone'	
		<i>wašq</i> 'to cut meat into long strips'	
<i>waqm</i> 'to treat violently, subdue, be trodden down and grazed off'		<i>waqð</i> 'to crush, tread, beat fiercely, throw down, overwhelm, overpower'	connecting sense: 'to knock down'
		<i>waqt</i> 'to beat fiercely and get the better of'	
		<i>waqs</i> 'to break one's neck, throw one so as to break his neck, crush'	

# ORIGIN OF THIRD CONSONANTS

## 34a. \**m* deverbative (attribute?)

A number of \**m* in C<sub>3</sub> position have an alternative source, as a deverbative noun-forming suffix. In this application \**m* is clearly cognate with suffixes in \**m* in Cushitic and can therefore be traced back to an early stage of Afroasiatic. See table 34a.

Table 34a  
\**m* deverbative (attribute)

Trilateral root	Simple form	Other related forms	Semantics
<i>dajm</i> 'to be dark'	<i>dajdaj</i> , <i>duduj</i> 'pitch dark'; <i>dujuj</i> 'deep darkness'	<i>dajn</i> 'to be cloudy, dark, rainy, plen- teous rain, cloudy sky' <i>dajw</i> 'to cover, wrap up, cover with dark- ness'	presumed earlier noun * <i>dagm</i> 'darkness'
<i>saqam</i> 'to be weak and ailing'; <i>suqm</i> , <i>saqam</i> 'illness; languor'		<i>suqūt</i> 'to fall, fall down, drop, decay, trip, err, set, be dropped or born, drop in, alight'	connecting sense: 'to go down, descend, decline'
<i>šajam</i> 'ruin, perdition, death'	<i>šajj</i> 'to cleave or break the head, be wounded or scarred'	<i>šajb</i> 'to doom to destruc- tion, ruin, sentence to death' <i>šajw</i> 'to overcome, con- quer, subdue'	
<i>šaḥm</i> 'fat, lard, grease, to give fat to eat, grease, smear'		<i>šaḥn</i> 'to fill, load' <i>šaḥw</i> 'to open the mouth, be open' (i.e., to widen mouth)	noun meaning is clearly central and primary to the set of meanings for * <i>ḥm</i> ; connecting sense: 'to in- crease amount or size,' hence 'to fatten'
<i>šalam</i> 'sign, token, mark'; <i>šalm</i> 'to mark, denote, put a sign to'		<i>šalb</i> 'to mark by an inci- sion or impression, cut off' <i>šalṭ</i> 'to mark a camel across the neck' <i>šalm</i> 'to split the upper lip'	connecting sense: 'to nick, notch'
<i>qaḍam</i> 'sword'	<i>qaḍḍ</i> 'to pierce, perfo- rate, bore, de- flower'	<i>qaḍb</i> 'to cut off, lop off'	contrast: noun vs. finitive fortative
<i>laḥm</i> 'kiss, to kiss'		<i>laḥʔ</i> 'to lap up the con- tents of a vessel'	connecting sense: 'to lap'

Table 34a (cont.)

Triliteral root	Simple form	Other related forms	Semantics
		(and other forms, for which see table 5)	
<i>lisām</i> 'to taste'	<i>lass</i> 'to eat, lick out'	<i>lasb</i> 'to bite' (and other forms, for which see tables 14 and 17a)	
<i>liṣām</i> 'cloth covering the mouth and nose'; <i>lafam</i> 'to wrap one's self up in the <i>lifām</i> '	<i>laff</i> 'to wrap up, envelope, roll or fold up, bend, double up'	<i>laft</i> 'to turn, roll about in the mouth, fold' <i>lafʿ</i> 'to cover the head, veil'	

35. \*ḏ extendative fortative

36. \*x extendative fortative

Another kind of semantic association can be discerned for \*ḏ and \*x as third consonants in verbs. They occur in triliterals in which the finitive meaning of the simpler biconsonantal becomes open-ended, durative, or iterative; thus they have the characteristics of the extendatives \*b and \*z (see tables 18 and 19). At the same time the verbs in which they appear as C<sub>3</sub> convey a more intensive action than that of the underlying biconsonantal, although not necessarily greatly more intensive. For this reason they have been called 'extendative fortatives' (\*x has another, distinct application; see table 27). See tables 35 and 36.

Table 35

## \*ḏ extendative fortative

Triliteral root	Simple form	Other related forms	Semantics
<i>jaʔḏ</i> 'to drink without sipping or pausing'		<i>jaʔṣ</i> 'to drink' <i>jaʔz</i> 'a fit of suffocation' <i>jaʔy</i> 'to bite upon'	connecting sense: 'to gulp' (?)
<i>jaʔḏ</i> 'to repel'	<i>jaʕjaʕ</i> 'to make camels kneel down or rise'	<i>jaʕb</i> 'to throw down' (and other forms, for which see table 14)	connecting sense: 'to let down'
<i>dalḏ</i> 'to run swiftly past'	<i>dildāl</i> 'to swing the head and arms in walking'	<i>dalīḥ</i> 'to walk with short steps' (and other forms, for which see table 28)	connecting sense: 'to walk'
<i>šaḥḏ</i> 'to sharpen, whet, grind'		<i>šaḥab</i> 'to scrape off the ground with a shovel' <i>šaḥaf</i> 'to skin, flay'	connecting sense: 'to scrape'

## ORIGIN OF THIRD CONSONANTS

*Table 35 (cont.)*

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>šaqḏ</i> 'to depart, emigrate'	<i>šaqq</i> 'to split, cleave, tear asunder, pierce through, separate'	<i>šaqʔ</i> 'to pierce through; cleave or hurt the head; part the hair' (and other forms, for which see table 38:23)	connecting sense: 'to split, cleave, part'
<i>lajḏ</i> 'to eat, consume, graze off the first green food, lick out a vessel'	<i>lajlaj</i> 'to chew and turn about in the mouth'	<i>lajn</i> 'to lick'	contrast: extendative fortative vs. non-finitive
<i>malḏ</i> 'to rub on the hand'		<i>malš</i> 'to feel, examine with the hand' <i>mals</i> 'to smooth, pacify, coax by stroking'	connecting sense: 'to touch'
<i>malḏ</i> 'to stretch the legs to the utmost in running'		<i>mald</i> 'to stretch, extend'	contrast: extendative fortative vs. durative
<i>waqḏ</i> 'to crush, tread, beat fiercely'		<i>waqš</i> 'to break one's neck, throw one off so as to break his neck' (and other forms, for which see table 9)	connecting sense: 'to knock down'
<i>walḏ</i> 'to walk apace, move quickly'		<i>wulūb</i> 'to enter, come to, arrive at' (and other forms, for which see table 38:67)	connecting sense: 'to move' (intr.)

*Table 36*

*\*x extendative fortative*

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>tarx</i> 'to scarify, make slight incisions in the skin'	<i>tarr</i> 'to be cut off; cut off'		
<i>ṭanax</i> 'to be too fat'		<i>ṭanaḥ</i> 'to be fat'	contrast: extendative fortative vs. iterative (probably in earlier durative effect)
<i>faḏx</i> 'to shatter'	<i>fadd</i> 'to trample'	<i>fady</i> 'to break, smash' <i>fadš</i> 'to shatter'	
<i>faḏx</i> 'to beat in pieces, dash, shatter'	<i>faḏḏ</i> 'to break off, detach, open, unseal, divide, disperse'	<i>faḏx</i> 'to pull out an eye'	contrast: extendative fortative *x vs. precipitative *x

Table 36 (cont.)

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>maṭx</i> 'to eat much, lick'		<i>maṭṣ</i> 'to chew with fore-part of mouth'	
<i>malx</i> 'to step apace, travel far'	<i>mall</i> 'to hasten, walk fast'	<i>maṣ</i> 'to step apace' <i>malt</i> 'to move, shake' <i>malw</i> 'to step apace, run'	connecting sense: 'to walk or move briskly'
<i>nasx</i> 'to efface, blot out, cause to disappear'		<i>nash</i> 'to sweep away earth, dust, etc.' (and other forms, for which see table 38:60)	connecting sense: 'to take off, take away'
<i>watx</i> 'to beat, thrash'		<i>watd</i> 'to ram in a peg or pole, be rammed in'	contrast: extensive vs. durative

37.

\*s causative

A few examples remain, finally, of \*s as C<sub>3</sub>, where a derivation from the old Afroasiatic \*s causative seems highly probable. These examples together with the evidence of Cushitic, in which \*s causative was suffixed to stems, show that the old causative was also originally a suffixed extension like all the rest identified here. See table 37.

Table 37  
\*s causative

<i>Trilateral root</i>	<i>Simple form</i>	<i>Other related forms</i>	<i>Semantics</i>
<i>ṭaus</i> 'to tread under'		<i>ṭauʔ</i> 'to come and go' <i>ṭauḥ</i> 'to go away, depart, go astray, wander' <i>ṭaur</i> 'to go around anything' (and other related forms, for which see table 38:32)	connecting sense: 'to walk'
<i>ṣans</i> 'to bend' (tr.)		<i>ṣunūd</i> 'to deviate, swerve from' <i>ṣanz</i> 'to deviate, depart from, swerve' <i>ṣanš</i> 'to bend, curve'	connecting sense: 'to curve away from'
<i>ṣafs</i> 'to prevent'	<i>ṣaff</i> 'to abstain from what is unlawful'		a specifically causative connotation is present here

# A Comparative Approach to Third-consonant Meanings

A second way of appreciating the recurrent semantic indications of third consonants in trilaterals is to take a comparative perspective of their contrasting effects when attached to roots identical in their first and second consonants. For this purpose 112 sets of roots have been tabulated in the following pages. Each set is composed of words of identical C<sub>1</sub> and C<sub>2</sub> that bear clearly relatable meanings but have different third consonants. In the first column of the tables the specific roots and their meanings are given; in the second column the proposed extensional meaning of the particular C<sub>3</sub> in a root (and of the particular fourth consonant in the case of quadrilaterals) is specifically noted; and in the third column the reconstructible biconsonantal root underlying each set is presented, along with its meaning. The origins of the third consonants in trilaterals as verb extensions, and in some cases as noun or modifier suffixes, emerges still more strongly from these data. The sixty-seven cases in table 38 consist mostly of sets with larger numbers of members (up to fifteen or more roots in some instances) than are found in the sets in tables 1–37. Another forty-five sets are presented in table 39. There is some overlap with sets of items shown in the previous tables, but to a great extent the evidence is additional to that already presented.

Table 38  
Related Verb Roots

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
1. <i>ʔabb</i> 'to put the hand to, shove, agitate'	(none)	*ʔb 'to shove, push away'
<i>ʔabʔ</i> 'to throw, hit, shoot'	*ʔ concisive	
<i>ʔabz</i> 'to leap, rush against'	*z intensive	
<i>ʔabs</i> 'to scold, frighten, humiliate, subdue'	*s fortative	
<i>ʔabʃ</i> 'to gather hastily, grasp up'	*ʃ venitive	
<i>ʔabʈ</i> 'to throw down, throw to the ground'	*ʈ durative intensive	
<i>ʔabq</i> 'to run away, escape (as a slave)'	*k intensive (effect)	
2. <i>ʔarb</i> 'to make tight (knot)'	*b finitive fortative	*ʔr 'to tie'
<i>ʔurüz</i> 'to stand firm, be firmly rooted' (i.e., be tied down)	*z intensive (manner)	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>ʔaraf</i> 'to make a knot, be de-limited, confine with'	* <i>p</i> intensive (manner)	
<i>ʔarm</i> 'to tie up, twist tightly'	* <i>m</i> fortative	
3. <i>badʔ</i> 'to begin, do a thing first'	* <i>ʔ</i> concisive	* <i>bd</i> 'to appear, emerge'
<i>badr</i> 'to come quickly or unexpectedly on, surprise, break forth suddenly'	* <i>r</i> diffusive	
<i>badʕ</i> 'to produce, originate, begin' (presumed earlier sense 'to bring forth from')	* <i>c</i> sunderative	
<i>badh</i> 'to come unexpectedly, surprise'	* <i>h</i> amplificative	
<i>badw</i> 'to appear'	* <i>w</i> inchoative / denominative	
<i>bady</i> 'to begin'	* <i>y</i> inchoative / denominative	
4. <i>batt</i> 'to cut, lop'	(none)	* <i>bt</i> 'to cut'
<i>batr</i> 'to maim, curtail, cut off, outroot'	* <i>r</i> diffusive	
<i>bataʕ</i> 'to be cut off, separated'	* <i>ʕ</i> sunderative	
<i>batk</i> 'to cut, cut off'	* <i>k</i> finitive	
<i>batl</i> 'to cut off, separate, sever'	* <i>l</i> finitive	
5. <i>tarr</i> 'to remove, depart'	(none)	* <i>tr</i> 'to depart, leave'
<i>tarʕ</i> 'to keep off, keep at a distance'	* <i>ʕ</i> sunderative	
<i>tark</i> 'to leave, abandon, desist, neglect'	* <i>k</i> finitive ('abandon')	
<i>tarmas</i> 'to withdraw from the turmoil, from battle'	* <i>m</i> fortative; * <i>c</i> non-finitive	
6. <i>θabāb</i> 'to sit firm'	(none)	* <i>θb</i> 'to stop, stay in place'
<i>θabθab</i> 'to sit firm'	(reduplicated simple form > intensive)	
<i>θabāt</i> 'to stand firm and permanently, persist'	* <i>t</i> durative	
<i>θabj</i> 'to sit on one's toes with the buttocks on the heels'	* <i>g</i> durative	
<i>θabar</i> 'to keep one from, retain, prevent'	* <i>r</i> diffusive	
<i>θabt</i> 'to prevent, delay'	* <i>t</i> durative intensive (here only fortative)	
7. <i>θaʕʕ</i> 'to vomit'	(none)	* <i>θʕ</i> 'to wet down'
<i>θaʕb</i> 'to make flow, shed'	* <i>b</i> extendative	
<i>θaʕjar</i> 'to pour out'	* <i>g</i> finitive fortative; * <i>r</i> diffusive	
<i>θaʕd</i> 'soft, fresh'	* <i>d</i> durative (> stative)	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>θaʕaʕ</i> 'to get corrupted and smell badly (water, etc.), decay, putrify'	*ʕ durative intensive	
<i>θaʕw</i> 'soft, unripe dates'	*w deverbative	
8. <i>jalx</i> 'to cut off a piece of skin'	*x precipitive	*gl 'to take off'
<i>jald</i> 'to skin, flay'	*d durative	
<i>jaʕ</i> 'to shave, skin, flay'	*ʕ durative intensive	
<i>julūʕ</i> 'to be naked, strip'	*ʕ sunderative (< earlier tr. sense 'to strip off')	
<i>jaʕy</i> 'to cut one another with swords'	*y complementive	
<i>jalf</i> 'to tear, scrape or scratch off, peel, shell, shovel away'	*p iterative	
<i>jalq</i> 'to shave, uncover, bare'	*k intensive (effect)	
<i>jalm</i> 'to lop, loose the flesh from the bones'	*m fortative	
<i>jalh</i> 'to remove, uncover'	*h amplificative	
<i>jalw</i> 'to disclose, reveal, polish, smooth, clean, wipe away'	*w inchoative (> tr.)	
<i>jala</i> 'to polish'	*y inchoative (> tr.)	
9. <i>hajj</i> 'to desist'	(none)	*hg 'to stop' (tr.)
<i>hajhaj</i> 'to be on the point of speaking but abstain, stop, stay'	(reduplicated simple form > intensive)	
<i>hajb</i> 'to shut off, inclose, wall, cover, veil'	*b finitive fortative	
<i>hajr</i> 'to hinder, refuse admission or use of, hindrance, prohibition'	*r noun suffix (verb < noun)	
<i>hajz</i> 'to shut off, cover, conceal'	*z intensive (manner)	
<i>hajl</i> 'fetter [n.], to hop, run in leaps'	*l noun suffix; verb < noun (i.e., to move as if hobbled or fettered)	
<i>hajm</i> 'to muzzle, prevent'	*m fortative	
<i>hajn</i> 'to stop, remain'	*n non-finitive	
<i>hajw</i> 'to remain, stay, stop'	*w inchoative (i.e., to become stopped)	
10. <i>harb</i> 'to sharpen'	*b extendative	*hr 'to scrape'
<i>hart</i> 'to rub hard'	*t durative	
<i>haraθ</i> 'to till and sow the ground'	*θ diffusive	
<i>harš</i> 'to wound with the claws'	*š venitive	

Table 38 (cont.)

Related forms	Extension	Reconstructed root
<i>ḥarq</i> 'to rub two things against each other'	* <i>k</i> andative	
11. <i>xarr</i> 'to split, cut'	(none)	* <i>xr</i> 'to split' (tr.)
<i>xarb</i> 'to devastate, destroy, demolish'	* <i>b</i> finitive fortative (here > finitive intensive)	
<i>xarbaq</i> 'to cut, tear'	* <i>b</i> extendative; * <i>k</i> intensive	
<i>xarbaš</i> 'to spoil, ruin'	* <i>b</i> fortative finitive; * <i>ʔ</i> venitive	
<i>xarbaš</i> 'to eat off all herbage, carry off everything'	* <i>b</i> finitive fortative; * <i>š</i> focative	
<i>xart</i> 'to pierce, make holes'	* <i>t</i> durative	
<i>xarʔ</i> 'to shell, strip off bark, leaves, berries'	* <i>ʔ</i> durative intensive	
<i>xarʕ</i> 'to split, break'	* <i>ʕ</i> sunderative	
<i>xarf</i> 'to cull or gather fruit'	* <i>p</i> iterative	
<i>xarq</i> 'to tear'	* <i>k</i> intensive (effect)	
<i>xarm</i> 'to unsew, cut off'	* <i>m</i> fortative	
12. <i>daḥḥ</i> 'to hide, conceal in the ground, lie with'	(none)	* <i>dḥ</i> 'to spread on the ground'
<i>daḥb</i> 'to lie with'	* <i>b</i> extendative	
<i>daḥj</i> 'to drag on the ground'	* <i>g</i> durative	
<i>daḥs</i> 'to sprawl'	* <i>c</i> non-finitive	
<i>daḥd</i> 'to sprawl'	* <i>d</i> middle	
<i>daḥm</i> 'to lie with'	* <i>m</i> fortative	
<i>daḥmal</i> 'to stretch on the ground to be trodden'	* <i>m</i> fortative; * <i>l</i> finitive	
<i>daḥw</i> 'to extend, spread, lie with'	* <i>w</i> inchoative	
<i>daḥy</i> 'to spread'	* <i>y</i> inchoative	
13. <i>daʕdaʕ</i> 'to run slowly and with short steps to and fro'	(reduplicated simple form > frequentative)	* <i>dʕ</i> 'to step'
<i>daʕθ</i> 'to stir up dust'	* <i>θ</i> diffusive	
<i>daʕs</i> 'to tread under foot'	* <i>s</i> causative (> tr.); * <i>k</i> intensive (effect)	
<i>daʕsaq</i> 'to destroy a cistern by trampling upon'		
<i>daʕš</i> 'to lift up the foot'	* <i>š</i> focative	
<i>daʕq</i> 'to trample upon'	* <i>k</i> intensive (effect)	
14. <i>ḏaʔt</i> 'to throttle savagely'	* <i>t</i> durative (> intensive)	* <i>ḏʔ</i> 'to kill'
<i>ḏaʔj</i> 'to tear, kill'	* <i>g</i> finitive fortative	
<i>ḏaʔʔ</i> 'to throttle, worry to death, slaughter, kill'	* <i>ʔ</i> durative intensive	
<i>ḏaʔf</i> 'to die suddenly'	* <i>p</i> intensive (manner)	
<i>ḏaʔw</i> 'to wither'	* <i>w</i> inchoative	
15. <i>ḏarr</i> 'to scatter, sprinkle, strew'	(none)	* <i>ḏr</i> 'to scatter around, strew about'

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
<i>ḍarʔ</i> 'to disperse'	*ʔ concisive	
<i>ḍarf</i> 'to flow, shed tears'	*p iterative	
<i>ḍarq</i> 'to drop excrement'	*k andative	
<i>ḍarq</i> 'to spring, gush forth'	*k intensive (effect)	
<i>ḍarw, ḍary</i> 'to throw corn against the wind to clean it, winnow, sow'	*w, *y inchoative (> tr.)	
16. <i>rutūʔ</i> 'to make a knot'	*ʔ concisive	*rt 'to tie'
<i>ratj</i> 'to lock, shut up'	*g finitive fortative	
<i>ratq</i> 'to mend, restore, stitch together, solder, cement, lock, shut'	*k intensive (effect)	
<i>irtām</i> 'to twist a thread round the finger as a reminder'	*m fortative	
<i>ratw</i> 'to stitch together, mend, tie up'	*w inchoative (> tr.)	
17. <i>raqḍ</i> 'to break or pound coarsely, crush, bruise'	(none)	*rḍ 'to hit and break'
<i>raqḍaq</i> 'to break into large pieces or fragments, pound, bruise'	(reduplicated simple form > intensive)	
<i>raqḥ</i> 'to break, break into pieces'	*h iterative	
<i>raqḥ</i> 'to break, smash, pelt with stones'	*x extendative fortative	
18. <i>zarib</i> 'to flow, run, run out, flow over'	*b extendative	*zr 'to spill'
<i>zarʕ</i> 'to sow, scatter seed, seed [n.]'	*ʕ sunderative	
<i>zarq</i> 'to drop excrement'	*k andative	
<i>zaram</i> 'to give birth'	*m fortative	
19. <i>zall</i> 'to slip, stumble'	(none)	*zl 'to slip'
<i>zalj</i> 'to glide along swiftly and lightly'	*g durative	
<i>zalex</i> 'slippery place'	*x precipitive	
<i>zalʕ</i> 'to take slyly'	*ʕ sunderative	
<i>zalaq</i> 'to slip, glide'	*k intensive (> durative?)	
<i>zalm</i> 'to smooth, fashion an ar- row' (< earlier sense 'to make slippery or smooth'?)	*m fortative	
20. <i>saht</i> 'to outroot, take the fat off the meat'	*t durative	*sh 'to remove by scrapping, rubbing, wiping'
<i>saḥf</i> 'to scrape the hair from a skin, shave the head,	*p iterative	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
loosen the fat of the back, the flesh from the bone'		
<i>saḥq</i> 'to sweep the floor, blow away the traces, soften hard things by rubbing, shave the head'	* <i>k</i> intensive (effect)	
<i>saḥl</i> 'to peel, skin, sweep, scour, rub, scratch'	* <i>l</i> finitive (seen in the senses 'skin' and 'scour')	
<i>saḥn</i> 'to smooth by rubbing, polish, rub colors'	* <i>n</i> non-finitive	
21. <i>sall</i> 'to draw out slowly'	(none)	* <i>sl</i> 'to draw out or off'
<i>salʔ</i> 'to purify butter, press ses- ame oil'	*ʔ concisive	
<i>salb</i> 'to take from with vio- lence, rob, plunder, steal'	* <i>b</i> finitive fortative	
<i>salt</i> 'to draw one thing from an- other'	* <i>t</i> durative	
<i>salḥ</i> 'to drop excrement'	* <i>ḥ</i> iterative	
<i>salx</i> 'to skin, flay, throw off the slough; undress'	* <i>x</i> extendative fortative	
<i>salʕ</i> 'to split, cleave'	*ʕ sunderative	
<i>salʔ</i> 'to harrow, level, plane'	* <i>p</i> iterative	
<i>salq</i> 'to loosen the flesh from the bones'	* <i>k</i> intensive (effect)	
22. <i>saiḅ</i> 'to flow, run, run away, escape, walk briskly, glide'	* <i>b</i> extendative	* <i>cy</i> 'to move in a gliding manner'
<i>saiḥ</i> 'to flow on the surface of the ground, spread; melt'	* <i>ḥ</i> iterative	
<i>sair</i> 'to step along, pace, go, depart, travel'	* <i>r</i> diffusive	
<i>saiʕ</i> 'to flow, dissolve, move, undulate'	*ʕ sunderative (< presumed ear- lier sense 'to flow away or out')	
<i>saiy</i> 'to flow or glide easily down the throat'	* <i>y</i> complementive	
<i>sail</i> 'to flow, run'	* <i>l</i> noun suffix (> verb)	
23. <i>šaqḳ</i> 'to split, cleave, tear asun- der, pierce through, sepa- rate'	(none)	* <i>ḳ</i> 'to split, cleave, part'
<i>šaqʔ</i> 'to pierce through, cleave or hurt the head, part the hair'	*ʔ concisive	
<i>šaqb</i> 'mountain cleft, cavity in the rock, narrow mountain	* <i>b</i> finitive fortative	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
pass' (< presumed earlier verb sense 'to form a split')		
<i>šaḡḡ</i> 'to lift the leg to make water'	* <i>ḡ</i> iterative (> durative)	
<i>šaḡḡ</i> 'to depart, emigrate'	* <i>ḡ</i> extendative fortative	
<i>šiḡḡ</i> 'portion, share, lot'	* <i>ḡ</i> focative (i.e., divided into discrete parts)	
24. <i>šamm</i> 'to be proud,' <i>šamam</i> 'height, summit'	(none)	* <i>ḡm</i> 'up, high'
<i>šamx</i> 'to be high, lofty, bear one's head high, be proud'	* <i>x</i> extendative fortative	
<i>šamr</i> 'to walk with drawn sinews, walk with light step and elegantly, walk proudly'	* <i>r</i> diffusive	
<i>šams</i> 'sun, to be bright and sunny'	* <i>s</i> fortative	
<i>šamiqq</i> 'great, tall, long' (< presumed earlier verb 'to put up, make high')	* <i>k</i> andative	
<i>šumuww</i> 'to be high, lofty, sub-lime'	* <i>w</i> inchoative / denominative	
25. <i>šaršar</i> 'to cut into pieces'	(reduplicated simple form > intensive)	* <i>ḡr</i> 'to slit'
<i>šarīḡ</i> 'sharp'	* <i>ḡ</i> diffusive	
<i>šarjaḡ</i> 'to cut smooth a quadrangular piece of wood, cut oblong'	* <i>g</i> durative; * <i>ḡ</i> sunderative	
<i>šaraḡ</i> 'to cut into pieces, saw asunder'	* <i>ḡ</i> iterative	
<i>šarx</i> 'to break through, pierce'	* <i>x</i> precipitive	
<i>šarz</i> 'to cut'	* <i>z</i> intensive (manner)	
<i>šarṭ</i> 'to make incisions in the skin, scarify'	* <i>ṭ</i> durative intensive	
<i>šarḡ</i> 'to strip the skin'	* <i>ḡ</i> sunderative	
<i>šarḡab</i> 'to cut into long strips'	* <i>ḡ</i> sunderative; * <i>b</i> extendative	
<i>šarq</i> 'to split in two'	* <i>k</i> intensive (effect)	
<i>šarm</i> 'to graze (in passing), wound slightly, split, tear, blunt, cut off the tip of the nose, split, rent, notch, gap [n.]'	* <i>m</i> noun suffix (verb meanings < noun)	
<i>šarmaṭ</i> 'to split into tatters'	* <i>m</i> noun suffix; * <i>ṭ</i> durative intensive	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>šarn</i> 'to be split'	* <i>n</i> noun suffix ('slit, cut') (> verb)	
<i>šarnaq</i> 'to cut'	* <i>n</i> noun suffix ('slit, cut'); * <i>k</i> andative	
<i>šaraš</i> 'incision in a camel's nose for the ring of the bridle'	* <i>š</i> focative	
26. <i>šaršar</i> 'to bite, graze off and chew'	(reduplicated simple form > intensive)	* <i>ʃr</i> 'to take a bite, take a sip'
<i>šarb</i> 'to drink'	* <i>b</i> extendative	
<i>šars</i> 'to devour'	* <i>s</i> fortative (> intensive)	
<i>šarq</i> 'to swallow in a moment, sip, imbibe'	* <i>k</i> intensive (effect)	
<i>šarah</i> 'to be greedy for food or drink, eat or drink greed- ily'	* <i>h</i> amplificative	
<i>šarhaf</i> 'to feed well'	* <i>h</i> amplificative; * <i>p</i> iterative (?)	
27. <i>šalb</i> 'to draw the marrow out of the bones'	* <i>b</i> extendative	* <i>ʃl</i> 'to strip, strip off, strip out'
<i>šalt</i> 'large and bright forehead, sharp and bright sword, hairless'	* <i>t</i> noun or modifier suffix	
<i>šald</i> 'to be shining (bald head)'	* <i>d</i> durative (> stative)	
<i>šalaʕ</i> 'to be bald'	* <i>ʕ</i> sunderative (i.e., take away or lose hair)	
<i>šalfaʕ</i> 'to cut off, shave'	* <i>p</i> iterative; * <i>ʕ</i> sunderative	
<i>šalm</i> 'to cut off the nose and ears'	* <i>m</i> fortative	
<i>šalmaḥ</i> 'to shave'	* <i>m</i> fortative; * <i>h</i> iterative	
<i>šalmaʕ</i> 'to tear or pull out, shave'	* <i>m</i> fortative; * <i>ʕ</i> sunderative	
28. <i>ḍafr</i> 'to throw food into the mouth of a beast of bur- den'	* <i>r</i> diffusive	* <i>dp</i> 'to give a portion of food to'
<i>ḍafz</i> 'to force a morsel into one's mouth'	* <i>z</i> intensive (manner)	
<i>ḍafs</i> 'to gather thistles and give them to the camel'	* <i>c</i> non-finitive	
29. <i>ḍaur</i> 'to suffer from violent hunger'	* <i>r</i> diffusive	* <i>dw</i> 'to bite'
<i>ḍauz</i> 'to chew'	* <i>z</i> intensive (manner)	
<i>ḍaus</i> 'to eat'	* <i>c</i> non-finitive	
<i>ḍauʕ</i> 'to feed'	* <i>ʕ</i> sunderative (> andative: 'give food to')	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
30. <i>ḡaub</i> 'to lay an ambush for an enemy'	* <i>b</i> extendative	* <i>ḡw</i> , * <i>ḡy</i> 'to come to harm, go bad, become damaged or useless'
<i>ḡaiḥ</i> 'to be deserted'	* <i>ḡ</i> iterative (> durative?)	
<i>ḡaiz</i> 'to wrong, oppress' }	* <i>z</i> intensive (manner)	
<i>ḡauz</i> 'to wrong' }		
<i>ḡaur</i> 'injury, to hurt, injure, damage' }	* <i>r</i> noun suffix (verb < noun)	
<i>ḡair</i> 'to injure, hurt, harm' }		
<i>ḡauḡ</i> 'to wrong'	* <i>ḡ</i> extendative fortative	
<i>ḡaiḡ</i> 'to perish, lose one's way, go astray'	* <i>ḡ</i> sunderative	
<i>ḡauḡ</i> 'to molest, bring to grief'	* <i>ḡ</i> sunderative	
<i>ḡaim</i> 'injustice, injury, oppression, assault, to injure, wrong, deceive, oppress'	* <i>m</i> noun suffix (verb < noun)	
<i>ḡais</i> 'to begin to wither'	* <i>c</i> non-finitive (as inceptive)	
31. <i>ṭarr</i> 'to urge on violently, drive together in one place'	(none)	* <i>ṭr</i> 'to send'
<i>ṭarʔ</i> 'to fall upon unexpectedly, appear suddenly, rise'	* <i>ʔ</i> concisive	
<i>ṭarb</i> 'to wander (from the road)'	* <i>b</i> extendative	
<i>ṭarḥ</i> 'to remove, turn from, avert, throw far away'	* <i>ḡ</i> iterative (> durative)	
<i>ṭard</i> 'to push away, drive away, repel, expel, pursue, chase, drive together'	* <i>d</i> durative	
<i>ṭarf</i> 'to turn off, repel'	* <i>p</i> intensive (manner)	
32. <i>ṭauʔ</i> 'to come and go'	* <i>ʔ</i> concisive	* <i>ṭw</i> 'to walk'
<i>ṭauḥ</i> 'to go away, depart, go astray, wander'	* <i>ḡ</i> iterative ('wander')	
<i>ṭaur</i> 'to go around anything'	* <i>r</i> diffusive	
<i>ṭaus</i> 'to tread under'	* <i>s</i> causative (> tr.)	
<i>ṭauf</i> 'to go around, circulate, describe a circle'	* <i>p</i> iterative	
<i>ṭayy</i> 'to go to, stay with, pass by, travel, enter (on a road)' (* <i>tawy</i> ?)	* <i>y</i> inchoative (> tr.)	
33. <i>ṣarṣar</i> 'to uncork, pull out an eye'	(reduplicated simple form > intensive)	* <i>ṣr</i> 'to take out, remove'
<i>ṣarab</i> 'to separate, put by, put aside'	* <i>b</i> extendative	
<i>ṣarḡ</i> 'to remove, lift up, lay aside'	* <i>ḡ</i> diffusive	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>ʕard</i> 'to throw or fling far'; <i>ʕarad</i> 'to flee, take to flight'; <i>ʕardas</i> 'to throw to the ground'	* <i>d</i> durative; * <i>s</i> fortative	
<i>ʕarz</i> 'to tear out violently'	* <i>z</i> intensive (manner)	
<i>ʕard</i> 'to offer, present, show it- self, happen, occur, come to meet, show, bring to mind, give or take in ex- change'	* <i>d</i> middle	
<i>ʕarq</i> 'to depart, set out'	* <i>k</i> andative	
<i>ʕarw</i> 'to come up to, approach, visit, occur, happen'	* <i>w</i> inchoative ('to be brought forth')	
34. <i>ʕaqb</i> 'to wrap a sinew round the arrow'	* <i>b</i> extendative	* <i>ʕk</i> 'to fold'
<i>ʕaqd</i> 'to tie, knit, make a knot'	* <i>d</i> durative	
<i>ʕaqr</i> 'to keep fettered a long time'	* <i>r</i> diffusive (> durative)	
<i>ʕaqš</i> 'to bend'	* <i>ʃ</i> venitive	
<i>ʕaqš</i> 'to twist and plait'	* <i>š</i> focative	
<i>ʕaqʔ</i> 'to wrap round, enfold, bind up'	* <i>ʔ</i> durative intensive	
<i>ʕaqf</i> 'to wind, bend, curve, make crooked, wind, twist, plait'	* <i>p</i> iterative	
<i>ʕaql</i> 'to tie up'	* <i>l</i> finitive	
35. <i>ʕarr</i> 'to sink in the ground (water)'	(none)	* <i>ʕr</i> 'to sink into'
<i>ʕarb</i> 'to pass away, depart, dis- appear, hide, sunset, west'	* <i>b</i> finitive fortative	
<i>ʕarz</i> 'to prick, thrust into'	* <i>z</i> intensive (manner)	
<i>ʕars</i> 'to sink'	* <i>c</i> non-finitive	
<i>ʕars</i> 'to plant, set, fasten, fix'	* <i>s</i> causative	
<i>ʕard</i> 'to fill, fill but partly'	* <i>d</i> middle	
<i>ʕarq</i> 'to plunge or dip into water, drown, rush into'	* <i>k</i> intensive (effect)	
36. <i>ʕatt</i> 'to break with the fingers, break into crumbs, crum- ble'	(none)	* <i>pt</i> 'to break apart'
<i>ʕatʕ</i> 'to tread to pieces, crush under foot'	* <i>ʕ</i> intensive (effect)	
<i>ʕatq</i> 'to split, break off, break loose, rip open'	* <i>k</i> intensive (effect)	
<i>ʕaṭḥ</i> 'to open'	* <i>ḥ</i> iterative (> durative)	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
<i>fat?</i> 'to break'	*? concisive	
37. <i>farfar</i> 'to break, cut, tear to pieces'	(reduplicated simple form > intensive)	* <i>pr</i> 'to cut (a piece from)'
<i>fartak</i> 'to cut very small'	* <i>t</i> durative; * <i>k</i> durative	
<i>faraθ</i> 'to cut up the liver, split'	* <i>θ</i> diffusive	
<i>farj</i> 'to put asunder, separate, split'	* <i>g</i> finitive fortative	
<i>furūd</i> 'to be single, isolated, be unique'	* <i>d</i> durative	
<i>farz</i> 'to separate, set apart, secrete, select'	* <i>z</i> intensive (manner)	
<i>fars</i> 'to break the neck, tear the prey into pieces'	* <i>s</i> fortative	
<i>farš</i> 'to spread on the floor, spread out'	* <i>ʃ</i> venitive	
<i>farš</i> 'to cut, split, tear'	* <i>š</i> focative	
<i>faršam</i> 'to break off, cut off'	* <i>š</i> focative; * <i>m</i> fortative	
<i>farđ</i> 'to make incisions, notches'	* <i>đ</i> middle	
<i>farʔ</i> 'to beat off fruit'	* <i>t</i> durative intensive	
<i>farʕ</i> 'to prune a tree'	* <i>ʕ</i> sunderative	
<i>farq</i> 'to split, separate'	* <i>k</i> intensive (effect)	
<i>farkah</i> 'to have the buttocks wide apart, separate the legs immoderately in walking'	* <i>k</i> durative; * <i>h</i> iterative	
<i>farm</i> 'to cut small, hash'	* <i>m</i> fortative	
<i>fary</i> 'to cut, cleave, sever'	* <i>y</i> inchoative (> tr.)	
38. <i>fašš</i> 'to separate, detach, pull out from'	(none)	* <i>pš</i> 'to take out'
<i>fašfaš</i> 'to separate, disperse'	(reduplicated simple form > iterative)	
<i>fašh</i> 'to break forth and shine in full splendor'	* <i>h</i> iterative	
<i>fašd</i> 'to bleed'	* <i>d</i> durative	
<i>fašʕ</i> 'to press the fresh date to make it come out of the shell, to take or scrape off the shell of an almond, put off the turban'	* <i>ʕ</i> sunderative	
<i>fašl</i> 'to cut off and separate one thing from another, detach, distinguish between'	* <i>l</i> finitive	
<i>fašm</i> 'to cut, break'	* <i>m</i> fortative	
<i>fašy</i> 'to separate, loosen, dismiss, set free'	* <i>y</i> inchoative (> tr.)	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
39. <i>faqq</i> 'to open, separate, set apart'	(none)	* <i>pk</i> 'to break or cut open'
<i>faqʔ</i> 'to prick open'	*ʔ concisive	
<i>faqr</i> 'to dig, pierce, bore through'	* <i>r</i> diffusive	
<i>faqs</i> 'to break the egg, hatch'	* <i>s</i> fortative	
<i>faqš</i> 'to break with the hand, break, splinter'	* <i>š</i> venitive	
<i>fuqūʕ</i> 'to burst, burst with anger, break down, crush'	* <i>ʕ</i> sunderative	
40. <i>fall</i> 'to blunt or jag the blade of a sword'	(none)	* <i>pl</i> 'to slit, nick'
<i>falj</i> 'to split in two, furrow the ground; divide, distribute'	* <i>g</i> durative	
<i>falh</i> 'to split, furrow the ground, plough'	* <i>h</i> iterative	
<i>falx</i> 'to split in two, break'	* <i>x</i> precipitive	
<i>falḏ</i> 'to cut into slices'	* <i>ḏ</i> fortative extendative	
<i>falʕ</i> 'to split, cleave, cut, burst'	* <i>ʕ</i> sunderative	
<i>faly</i> 'to break in one's head'	* <i>y</i> intensive (effect)	
<i>falq</i> 'to split, tear, cut, shear'	* <i>k</i> intensive (effect)	
<i>faly</i> 'to strike with a sword'	* <i>y</i> denominative (presumed earlier noun 'blow from a sharp instrument')	
41. <i>qabb</i> 'to lift a little'	(none)	* <i>kb</i> 'to pick up'
<i>qabs</i> 'to fetch fire from, learn from, borrow passages from an author'	* <i>c</i> non-finitive or * <i>s</i> fortative	
<i>qabš</i> 'to take with the fingertips, take a pinch'	* <i>š</i> focative	
<i>qabḏ</i> 'to close the hand, make a fist, seize and hold, grasp, receive money, get payment for'	* <i>d</i> middle (reflexive: first meaning: autobenefactive: last two meanings)	
<i>qabʕ</i> 'to seize and hold, grasp'	* <i>ʕ</i> durative intensive	
<i>qubūʕ</i> 'to pull out a tooth'	* <i>ʕ</i> sunderative	
<i>qabul</i> 'to receive, accept, admit, take from'	* <i>l</i> finitive	
<i>qabw</i> 'to pick up, gather, cull'	* <i>w</i> inchoative (> tr.)	
42. <i>qašš</i> 'to cut off, clip (with scissors)'	(none)	* <i>kš</i> 'to clip'
<i>qašqaš</i> 'to cut off the tops of the hair'	(reduplicated simple form > frequentative)	
<i>qašb</i> 'to cut, cut off, dissect, cut stones'	* <i>b</i> extendative	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
<i>qaşr</i> 'to be short, be too short, cut short the prayer, shortness, smallness'	* <i>r</i> modifier suffix (cf. etymologies of 'short' in English, Spanish, etc.)	
<i>qaşf</i> 'to break, cut off, shatter'	* <i>p</i> intensive (manner)	
<i>qaşf</i> 'to kill a louse between the nails' (i.e., to pinch off)	* <i>ʕ</i> sunderative	
<i>qaşl</i> 'to cut off'	* <i>l</i> finitive	
<i>qaşm</i> 'to break entirely, fragment, piece'	* <i>m</i> noun suffix (verb < noun)	
<i>qaşmal</i> 'to break, cut off'	* <i>m</i> noun suffix or fortative; * <i>l</i> finitive	
43. <i>qalb</i> 'to take the marrow out of a palm'	* <i>b</i> extendative	* <i>kl</i> 'to pick, pluck'
<i>qalx</i> 'to uproot, tear off'	* <i>x</i> precipitive	
<i>qalş</i> 'to remove the crust from a wound'	* <i>t</i> venitive	
<i>qalt</i> 'to empty a reservoir, clean, polish, scrape off'	* <i>t</i> durative intensive	
<i>qalʕ</i> 'to tear from its place, pull out, uproot, extract'	* <i>ʕ</i> sunderative	
<i>qalf</i> 'to remove bark, rind, peel, take off the bast' ( <i>qilf</i> 'rind, crust')	* <i>p</i> iterative	
44. <i>kaθθ</i> 'thick, dense'	(none)	* <i>kθ</i> 'to increase in size or amount'
<i>kaθʔ</i> 'to grow, be high and densely grown'	* <i>ʔ</i> concisive	
<i>kaθb</i> 'to gather, heap up, assemble'	* <i>b</i> extendative	
<i>kaθh</i> 'to gather, collect'	* <i>h</i> iterative	
<i>kaθr</i> 'much, many'; <i>kaθar</i> 'to surpass in number or quantity'	* <i>r</i> modifier suffix (verb < adjective)	
<i>kaθf</i> 'dense crowd, throng, great quantity'	* <i>p</i> intensive (manner)	
<i>kaθm</i> 'to carry together, heap up, fill'	* <i>m</i> fortative	
45. <i>kass</i> 'to grind or pound to powder'	(none)	* <i>ks</i> or * <i>kc</i> 'to hit hard'
<i>kaskas</i> 'to pound minutely'	(reduplicated simple stem > intensive)	
<i>kasʔ</i> 'to strike with a sword'	* <i>ʔ</i> concisive	
<i>kash</i> 'to beat, flog, punish'	* <i>h</i> iterative	
<i>kasr</i> 'to break, wreck, overthrow, ruin'	* <i>r</i> diffusive	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>kaŋ</i> 'to beat and kick one on the back'	*ŋ sunderative (> andative)	
46. <i>kašš</i> 'to chase away flies'	(none)	*kɬ 'to take away'
<i>kaškaš</i> 'to flee, take to flight'	(reduplicated simple form > intensive)	
<i>kašʔ</i> 'to strike off with a sword'	*ʔ concisive	
<i>kašr</i> 'to uncover, bare, show the teeth'	*r diffusive	
<i>kašt</i> 'to skin, flay, skim'	*t durative intensive	
<i>kašŋ</i> 'to go, depart'	*ŋ sunderative	
<i>kašf</i> 'to uncover, bare, unveil, reveal'	*p intensive (manner)	
<i>kašm</i> 'to cut off the nose'	*m fortative	
47. <i>labb</i> 'to stay, remain, abide'	(none)	*lb 'to stay'
<i>labθ</i> 'to tarry, stay longer, remain'	*θ diffusive	
<i>labad</i> 'to stay, abide, adhere firmly'	*d durative	
48. <i>latt</i> 'to break, pound'	(none)	*lt 'to hit repeatedly'
<i>latʔ</i> 'to throw or beat at with a stone'	*ʔ concisive	
<i>latx</i> 'to flog so as to tear the skin'	*x extendative fortative	
<i>latḥ</i> 'to throw pebbles into one's face, beat'	*ḥ iterative	
<i>latd</i> 'to beat with the fist'	*d durative	
<i>latz</i> 'to beat with the fist, box'	*z intensive (manner)	
<i>latɣ</i> 'to beat with the fist'	*ɣ intensive (effect)	
<i>latm</i> 'to beat'	*m fortative	
49. <i>laʃb</i> 'to salivate, slaver'	*b extendative	*lʃ 'to nip'
<i>laʃz</i> 'to lick the young one'	*z intensive (manner)	
<i>laʃs</i> 'to bite'	*s fortative	
<i>laʃs</i> 'to chew'	*c non-finitive	
<i>laʃaš</i> 'to be greedy'	*š focative	
<i>laʃt</i> 'to lick'	*t durative intensive	
<i>laʃd</i> 'to take up with the tongue'	*d middle	
<i>laʃw</i> 'glutton, greedy'	*w deverbative	
<i>laʃwas</i> 'to bite'	*w deverbative; *s fortative or causative as denominative	
50. <i>laqq</i> 'to lick, lap'	(none)	*lk 'to lap'
<i>laqlaq</i> 'to move the jaws tremulously and put out the tongue (snake), smack with the tongue'	(reduplicated simple form > frequentative and intensive)	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>laqs</i> 'to catch with the mouth'	*s fortative	
<i>laqʕ</i> 'to suck'	*ʕ sunderative (presumed earlier sense: 'to suck up')	
<i>laqf</i> 'to catch, catch and swallow'	*p intensive (manner)	
<i>laqm</i> 'to swallow, devour, eat hastily'	*m fortative	
51. <i>lahab</i> 'to suffer from intense thirst'	*b extendative	*lh 'to swallow'
<i>lahθ</i> 'to let the tongue hang out from thirst or tiredness'	*θ diffusive	
<i>lahs</i> 'to lick'	*c non-finitive	
<i>lahs</i> 'to throw one's self greedily upon the food'	*s fortative	
<i>lahʔ</i> 'to swallow greedily'	*ʔ durative intensive	
<i>lahaʕ</i> 'to draw out the corners of the mouth in speaking'	*ʕ sunderative	
<i>lahm</i> 'to swallow at one gulp'	*m fortative	
52. <i>mahh</i> 'to be worn out'	(none)	*mh 'to wear away by rubbing'
<i>mahj</i> 'to skin, decorticate, make flexible by rubbing, wipe, sweep the ground'	*g durative	
<i>mahs</i> 'to knead, scrape and tan'	*s fortative or *c non-finitive	
<i>mahš</i> 'to peel off the skin'	*ʃ venitive	
<i>mahq</i> 'to efface, blot out, destroy, annihilate'	*k intensive (effect)	
<i>mahn</i> 'to wear out a garment'	*n modifier suffix ('worn out')	
<i>mahw</i> 'to efface entirely, wipe off, be entirely effaced'	*w inchoative (> tr.)	
<i>mahy</i> 'to efface, blot out, destroy'	*y inchoative (> tr.)	
53. <i>mart</i> 'to smooth'	*t durative	*mr 'to brush with the fingers'
<i>marθ</i> 'to crush with the fingers'	*θ diffusive	
<i>marah</i> 'to oil, anoint, rub with ointments; coat slightly with mud'	*h iterative	
<i>marz</i> 'to press slightly with the fingertips'	*z intensive (manner)	
<i>mars</i> 'to macerate and crush with the hand'	*s fortative (> intensive)	
<i>mars</i> 'to wipe'	*c non-finitive	
<i>marš</i> 'to scratch with the nails'	*ʃ venitive	
<i>marʕ</i> 'to anoint abundantly'	*c sunderative (> andative)	
<i>mary</i> 'to anoint with oil'	*γ intensive (effect)	
<i>marq</i> 'to scrape off the wool'	*k intensive (effect)	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>mary</i> 'to stroke the udder of the camel for milking'	*y inchoative (> tr.)	
54. <i>mass</i> 'to touch slightly'	(none)	*ms 'to touch'
<i>mash</i> 'to pass the hand over anything, wipe, rub in, salve, anoint, feel, touch, stroke'	*h iterative	
<i>mas̥t</i> 'to press (a skin bag, etc.) with fingers to empty it, wring out'	*t durative intensive	
<i>mask</i> 'to seize and hold, hold'	*k finitive	
<i>masw</i> 'to introduce one's hand into the camel's womb to take out sperm'	*w inchoative (> tr.)	
<i>masy</i> 'to clear the uterus of a camel from sperm, to wipe with the hand'	*y inchoative (> tr.)	
55. <i>malx</i> 'to seize with the hands or teeth, snatch from'	*x precipitive	*ml 'to remove'
<i>malz</i> 'to go away with, carry off'	*z intensive (manner)	
<i>mals</i> 'to geld a ram by twisting off his testicles'	*s fortative	
<i>malš</i> 'to pluck out (feathers, hair)'	*ʃ venitive	
<i>mal̥t</i> 'to scald a bird or animal to pluck its feathers or hair, pluck, shave off'	*t durative intensive	
<i>malʕ</i> 'to skin a sheep from the neck downward'	*ʕ sunderative	
56. <i>natʔ</i> 'to leave one's place, appear suddenly'	*ʔ concisive	*nt 'to draw out, bring forth'
<i>nitāj</i> 'to give birth, bring forth, produce'	*g finitive fortative	
<i>nath</i> 'to ooze out, sweat out'	*h iterative	
<i>natr</i> 'to take by force, snatch, rob, tear with hands or teeth'	*r diffusive (more clearly present in the second meaning)	
<i>natx</i> 'to draw out, pull out, tear'	*x extendative fortative	
<i>natš</i> 'to pull out, tear away and try to carry off'	*ʃ venitive	
<i>nutūd</i> 'to be diseased and peel off in strips (skin)'	*d middle	
<i>nutūʕ</i> 'to break forth, spring,	*ʕ sunderative	

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Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
gush forth, tear away by force'		
<i>natf</i> 'to pull out, deprive of hair, pluck'	* <i>p</i> iterative	
<i>natq</i> 'to draw bucket out of the well'	* <i>k</i> andative	
<i>natq</i> 'to seize violently and carry off'	* <i>k</i> intensive (effect)	
<i>natk</i> 'to snatch violently and break'	* <i>k</i> finitive	
<i>natk</i> 'to pull out'	* <i>k</i> durative	
<i>natl</i> 'to draw to one's self'	* <i>l</i> finitive	
57. <i>najb</i> 'to remove the bark from a tree'	* <i>b</i> extendative	* <i>ng</i> 'to strip'
<i>najr</i> 'to cut or plane wood'	* <i>r</i> diffusive	
<i>naif</i> 'to shave or polish an arrow'	* <i>p</i> iterative	
<i>naif</i> 'to cut down, pull out'	* <i>p</i> intensive (manner)	
<i>najl</i> 'to blot out, erase, wipe the writing tablet'	* <i>l</i> finitive	
<i>najw</i> 'to cut down a tree and strip off its branches, skin a camel'	* <i>w</i> inchoative (> tr.)	
58. <i>naif</i> 'to creep out of the egg'	* <i>g</i> durative	* <i>np</i> 'to come out'
<i>nafāz</i> 'to come forth, arrive, reach'	* <i>z</i> intensive (> fortative)	
<i>nafr</i> 'to flee and disperse, run away'	* <i>r</i> diffusive	
<i>naḡṣ</i> 'to pick wool or cotton, pluck'	* <i>t</i> venitive	
<i>naḡṣ</i> 'to emit urine forcibly'	* <i>ṣ</i> focative	
<i>naḡd</i> 'to drop a foal, put forth ears'	* <i>d</i> middle	
<i>naḡw</i> 'to drive away, chase off'	* <i>w</i> inchoative (> tr.)	
<i>naḡy</i> 'to expel, drive away, banish, exile'	* <i>y</i> inchoative (> tr.)	
59. <i>naḡθ</i> 'to blow upon, spit out'	* <i>θ</i> diffusive	* <i>np</i> 'to inhale, exhale'
<i>naḡj</i> 'to blow violently'	* <i>g</i> finitive fortative	
<i>naḡh</i> 'to spread odor, be fragrant, blow'	* <i>h</i> iterative	
<i>naḡx</i> 'to blow, breathe in air, blow upon'	* <i>x</i> extendative fortative	
<i>naḡs</i> 'to injure by breathing upon, breath of life, vital spirit, soul'	* <i>s</i> fortative	

Table 38 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>nafti</i> 'to sneeze'	* <i>t</i> durative intensive	
60. <i>nash</i> 'to sweep away earth, dust, etc.'	* <i>h</i> iterative	* <i>nc</i> 'to take off, take away'
<i>nasx</i> 'to efface, blot out, cause to disappear'	* <i>x</i> extendative fortative	
<i>nasr</i> 'to loosen and take away, tear off'	* <i>r</i> diffusive	
<i>nasl</i> 'to molt, lose feathers or hair, pluck out'	* <i>l</i> finitive	
<i>nasf</i> 'to destroy, pull down a building to its foundations, pull out by the root'	* <i>p</i> intensive (manner)	
<i>nasʕ</i> 'to be loose and rickety (tooth), have such teeth' (i.e., teeth ready to fall out)	* <i>ʕ</i> sunderative	
61. <i>nasʔ</i> 'to wring out washed clothes or guts'	* <i>t</i> durative intensive	* <i>nc</i> 'to let leak'
<i>nasγ</i> 'to water; flowing sap of fresh shoots of newly pruned trees'	* <i>γ</i> complementive	
<i>nasq</i> 'to water'	* <i>k</i> andative	
62. <i>naqd</i> 'to ooze out, exude, flow out slowly'	(none)	* <i>nd</i> 'to ooze out'
<i>naqb</i> 'to flow, run'	* <i>b</i> extendative	
<i>naqj</i> 'to suppurate'	* <i>g</i> durative	
<i>naqh</i> 'to sprinkle with water, water; quench the thirst, shed tears'	* <i>h</i> iterative	
<i>naqx</i> 'to sprinkle with water, etc.'	* <i>x</i> extendative fortative	
<i>naɖx</i> 'to gush forth, boil or bubble up'	* <i>x</i> precipitive	
63. <i>nahb</i> 'to seize and carry away, rob, plunder'	* <i>b</i> extendative	* <i>nh</i> 'to assail'
<i>nahd</i> 'to rise and rush against'	* <i>d</i> durative	
<i>nahz</i> 'to thrust, beat, push back, keep off, goad on, urge'	* <i>z</i> intensive (manner)	
<i>nahs</i> 'to seize the flesh with the front teeth and tear it off'	* <i>s</i> fortative	
64. <i>hatt</i> 'to break, crumble, tear'	(none)	* <i>ht</i> 'to break'
<i>hathat</i> 'to break, crush'	(reduplicated simple form > intensive)	

# ORIGIN OF THIRD CONSONANTS

Table 38 (cont.)

Related forms	Extension	Reconstructed root
<i>hatʔ</i> 'to tear, rend'	*ʔ concisive	
<i>hatr</i> 'to tear, break'	*r diffusive (implied in gloss 'tear')	
<i>hatk</i> 'to rend the veil and disclose anything hidden'	*k finitive (thoroughness of action)	
<i>hatm</i> 'to strike on the mouth and beat out one's front teeth'	*m fortative	
<i>hatw</i> 'to crush with the foot'	*w inchoative (> tr.)	
65. <i>wajʔ</i> 'to beat, thrust, decapitate'	*ʔ concisive	*wg 'to hit'
<i>wajf</i> 'to beat, throb'	*p iterative	
<i>wajh</i> 'to strike on the face and push back' (influenced in meaning by probably distinct root set <i>wajh</i> 'front, face' and <i>wajm</i> 'face')	*h amplificative	
<i>wajm</i> 'to strike with the fist'	*m fortative	
<i>wajn</i> 'blow, thrust [n.]'	*n noun suffix	
<i>wajn</i> 'to beat cloth or linen, full'	*n non-finitive	
66. <i>wakb</i> 'to go step by step, trot'	*b extendative	*wk 'to step'
<i>wakt</i> 'to walk in short steps'	*t durative	
<i>wakh</i> 'to tread violently upon'	*h iterative	
<i>wakr</i> 'to go in leaps, rear and prance'	*r diffusive	
<i>wukim</i> 'to be trodden down and grazed off by cattle'	*m fortative	
<i>wakn</i> 'to pace along vigorously, get along, advance'	*n non-finitive	
67. <i>wulūb</i> 'to enter, come to, arrive at'	*b finitive fortative	*wl 'to move' (intr.)
<i>walūj</i> 'to enter, creep or slip in'	*g finitive fortative (influenced by durative *g?)	
<i>walḏ</i> 'to walk apace, move quickly'	*ḏ extendative fortative	
<i>walas</i> 'to stride along swiftly with outstretched neck'	*s fortative	
<i>walq</i> 'to be nimble, agile, active, hasten'	*k intensive (of effect)	

## Polysemy and Third-Consonant Meanings

As a number of examples in Tables 1–37 hint, polysemic roots are very common in Semitic; and with third consonants shown generally to be suffixial in origin, polysemy emerges as a still more prominent phenomenon among the underlying biconsonantal roots, a few limited instances of which are given in table 38: 25 and 26, 29 and 30, 58 and 59, and 60 and 61. The historical explanation of such polysemy is straightforward. The verbal system as it developed in Semitic arrogated to itself all the positions in the verb utterance except for those of the consonants of the historical root. Vocalic and prosodic elements originally part of the Afroasiatic stem were displaced and lost in the process. Comparison with Proto-Cushitic suggests that five vowels, each occurring long or short, could participate in earlier Afroasiatic root structure, allowing ten different possible segmental shapes for each original CVC root. If the Southern Cushitic and Chadic prosodic patterns, which allow either of two possible tone patterns for any CVC shape, also reflect an older Afroasiatic characteristic, then the number of potential roots that might be collapsed into one biliteral by the application of the Semitic verbal system would double to twenty. Even if the original number of Afroasiatic vowels was three as in Semitic, or four as has been proposed for Chadic (Newman 1977), still the minimum potential number of root-shapes collapsed as one in each Semitic CC would be either twelve or sixteen. In addition, some Afroasiatic consonant distinctions have been lost in Semitic (the introduction to Section 3 above), and that development would further increase the variety of roots that would have fallen together in some Semitic root-shapes. Extensive and recurrent polysemy in Semitic roots is thus simply the logical and necessary outcome of the falling together in pre-Proto- and Proto-Semitic of a great many once-distinct Afroasiatic roots.

Cognizance of the polyphyletic origins of most Semitic root-shapes is essential in the comparative reconstruction of Semitic. Otherwise Semiticists will continue to be tempted to attribute to single reconstructed roots words that are not historically cognate at all, as well as to perform mental gymnastics in explaining the semantic derivations of the supposed reflexes. The difficulties of discriminating the separate phyletic strands united in one root-shape have also sometimes been increased by the ability of one meaning of a particular triliteral to influence another of its meanings and thereby produce a secondary sense that partially confuses or conflates the two (see table 38: 65 above for a probable example). An effective approach to separating the different etymological strands is to divide up sets of roots of identical  $C_1$  and  $C_2$  into different subsets according to the semantic fields that recur among them. The semantic distinctiveness of each subset is in this way thrown into sharp relief, and the distinct historical origins of each subset in a separate earlier Afroasiatic root becomes clear.

Table 39 presents an array of semantic subsets of a number of such polysemic and therefore polyphyletic root-shapes, drawn again from Arabic. It illustrates the process of analysis that needs to be followed; at the same time, and more directly important for the thesis of this article, it adds another forty-five sets of supportive evidence for the derivation of Semitic third consonants principally from no longer productive verb extensions. The data once more tend consistently to confirm the specific identifications that have already been proposed in Tables 1–37 for particular C<sub>3</sub> and were illustrated from a similarly comparative perspective in the previous sixty-seven sets contained in table 38.

Table 39  
*Traces of Polyphyletic Roots*

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
68. ʔafad 'to hasten'	*d durative	*ʔp 'to make a quick movement'
ʔafir 'to run, jump, be zealous and quick in serving'	*r diffusive	
ʔafal 'to be alert, quick'	*l modifier suffix	
69. ʔafad 'to approach, come up'	*d durative	*ʔp 'to arrive'
ʔafq 'to travel to distant parts, all over the world'	*k andative	
70. ʔafir 'to drive away'	*r diffusive	*ʔp 'to assault'
ʔafx 'to hit on the crown of the head'	*x precipitive	
ʔafq 'to conquer'	*k intensive (effect)	
71. ʔafk 'to produce nothing for want of rain'	*k finitive	*ʔp 'to lack, be without'
ʔafal 'to dry up (milk of suckling woman)';	*l finitive	
ʔafūl 'to vanish, disappear (moon)'		
ʔaft 'to alienate, restrain, prevent from'	*t durative	
ʔafn 'to exhaust all milk in the udder, have little milk'	*n modifier suffix ('dry, of udder')	
72. ʔafk 'to lie'	*k finitive	*ʔp 'to cheat'
ʔafq 'to deceive'	*k andative ('to lie to')	
73. rabb 'to abide'	(none)	*rb 'to stop' (intr.)
rabθ 'to prevent, hinder'	*θ diffusive	
rabāx 'to faint during coition';	*x precipitive	
rabix 'to faint, swoon'		
rabix 'to crouch on one's heels, brood'	*x extendative fortative	
rubūd 'to stop, stay, remain'	*d durative	
rabš 'to watch an opportunity, wait for'	*š focative	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>rabḏ</i> 'to lie with crossed feet, sit or lie in wait for'	*ḏ middle	
<i>rabʕ</i> 'to stay, remain, abide, stop, wait for, restrain one's self, abstain, desist'	*ʕ sunderative (in the last sense, i.e., 'keep oneself from')	
74. <i>rabat</i> 'to be locked'	*t durative	*rb 'to tie'
<i>rubūd</i> 'to keep back, fetter, tie up'	*d durative	
<i>rabat</i> 'to tie, tie up, fasten'	*t durative intensive	
<i>rabq</i> 'to put another's head into a noose, catch a bird by its head in a noose or snare, entrap, entangle, bind, tie up, fetter'	*k intensive (effect)	
<i>rabk</i> 'to mend, make good, make up for'	*k finitive	
75. <i>rabb</i> 'to gather, increase, complete'	(none)	*rb 'to increase, raise (in height, size, amount, or number), move upward' (tr.)
<i>rabʔ</i> 'to lift up, elevate, be high, sublime'	*ʔ concisive	
<i>rabt</i> 'to bring up, educate'	*t durative	
<i>ribḥ</i> 'to gain in trade, etc.'	*ḥ iterative	
<i>rabs</i> 'to fill a skin bag'	*s fortative	
<i>rabʕ</i> 'to lift up a stone to try one's strength, lift a load with another by a lever to place it on the camel's back'	*ʕ sunderative	
<i>rabl</i> 'to be numerous, multiply, have many children, cattle, tree greening afresh in autumn'; <i>ribl, rabil</i> 'plump, fleshy'	*l modifier or noun suffix	
<i>rabw</i> 'to grow up, be brought up, swollen gland, increase, growth'	*w inchoative	
<i>rabw</i> 'hill'	*w deverbative	
76. <i>rabb</i> 'to put in good order, arrange, improve, ameliorate, be lord and master, exercise dominion over'	(none)	*rb 'to put into good order, put right'
<i>rabʔ</i> 'to improve'	*ʔ concisive	

# ORIGIN OF THIRD CONSONANTS

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>rabað</i> 'to be skillful in handling'	*ð extendative fortative	
<i>rabat</i> 'to bring into order, into a system'	*t durative intensive	
<i>rabγ</i> 'to lead an easy life'	*γ complementive	
77. <i>raff</i> 'herd, swarm, flock, fold for cattle, to spread the wings for flying'	(none)	*rp 'to raise, extend, increase in number or amount'
<i>rafrac</i> 'to spread the wings'	(reduplicated simple stem)	
<i>rafax</i> 'rise, swell'	*x extendative fortative	
<i>rafɖ</i> 'to lift, lift up'	*d durative	
<i>rafɣ</i> 'to lift, lift up, raise, hoist'	*ɣ sunderative ('lift up')	
<i>rafɖ</i> 'to be large, begin to cluster'	*ɖ middle	
<i>rafl</i> 'to collect water in a well'	*l finitive	
78. <i>raft</i> 'to refuse, reject, push aside'	*t durative	*rp 'to expel'
<i>rafɖ</i> 'to abandon, forsake, leave in the lurch, give up, let go, renounce, reject'	*ɖ middle	
<i>rafɣ</i> 'to remove, cause to disappear'	*ɣ sunderative	
79. <i>raftθ</i> 'to talk obscenities (to a woman)'	*θ diffusive	*rp 'to call'
<i>rafɣ</i> 'to raise the voice, name aloud, appeal'	*ɣ sunderative (probably originally an andative, 'to call to')	
80. <i>raff</i> 'to suck, eat much, eat or kiss with the edge of the lips, be eager for, crave'	(none)	*rp 'to eat up'
<i>rafɣ</i> 'to eat and drink well'	*ɣ venitive	
<i>rafɖ</i> 'to allow to pasture freely'	*ɖ middle (i.e., let animals feed for themselves)	
81. <i>raff</i> 'to treat kindly, honor, be serviceable in everything'	(none)	*rp 'to treat well'
<i>rafrac</i> 'to wish well to, protect'	(reduplicated simple form > durative)	
<i>rafʔ</i> 'to quiet, free from fear, reestablish friendship, make peace'	*ʔ concisive	
<i>rafɖ</i> 'to help, assist'	*ɖ durative	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>rafaq</i> 'to be gentle, kind toward'; <i>rifq</i> 'to help, assist, favor, profit'; <i>rafiq</i> 'friend'	* <i>k</i> andative	
<i>rafh</i> 'to lead a comfortable and enjoyable life'	* <i>h</i> amplificative	
<i>rafw</i> 'to quiet, free from fear'	* <i>w</i> inchoative (> tr.)	
82. <i>rafz</i> 'to beat, throb'	* <i>z</i> intensive (manner)	* <i>rp</i> 'to knock'
<i>raft</i> 'to break into small pieces, smash a bone, be broken into small fragments'	* <i>t</i> durative (> iterative)	
<i>rafš</i> 'to grind, pound'	* <i>ʃ</i> venitive	
<i>rafs</i> 'to kick'	* <i>s</i> fortative	
83. <i>rafʔ</i> 'to mend anything torn'	* <i>ʔ</i> concisive	* <i>rp</i> 'to tie'
<i>rafs</i> 'to tie up a camel with a rope'	* <i>s</i> fortative	
<i>rafq</i> 'to tie the forefeet of a camel'	* <i>k</i> intensive (effect)	
<i>rafw</i> 'to mend, darn, fine seam'	* <i>w</i> deverbative (verb > noun)	
84. <i>qarb</i> 'to sheathe the sword'	* <i>b</i> finitive fortative	* <i>kr</i> 'to hold'
<i>qaraʔ</i> 'to pick up, gather'	* <i>ʔ</i> concisive	
<i>qaraθ</i> 'to toil for gain'	* <i>θ</i> diffusive	
<i>qard</i> 'to collect, gather, hoard up'	* <i>d</i> durative	
<i>qardab</i> 'to gather meat in a pot'	* <i>d</i> durative; * <i>b</i> finitive fortative	
<i>qardam</i> 'to take all'	* <i>d</i> durative; * <i>m</i> fortative	
<i>qarz</i> 'to take with the fingertips, pinch'	* <i>z</i> intensive (manner)	
<i>qarš</i> 'to gather from all sides, earn, gain'	* <i>ʃ</i> venitive	
<i>qarš</i> 'to pinch, pull with two fingers, clutch'	* <i>š</i> focative	
<i>qard</i> 'to impart reward, lend money'	* <i>d</i> middle	
<i>qarʔ</i> 'to withhold from one part of what is due him'	* <i>ʔ</i> durative intensive	
<i>qaraz</i> 'to grow wealthy (after lowliness)'	* <i>z</i> extendative	
<i>qaraf</i> 'to try to earn sustenance for one's family'	* <i>p</i> iterative	
<i>qarm</i> 'to retain, hold'	* <i>m</i> fortative	

# ORIGIN OF THIRD CONSONANTS

Table 39 (cont.)

Related forms	Extension	Reconstructed root
<i>qarmaš</i> 'to gather, collect'	* <i>m</i> fortative; * <i>t</i> venitive	
<i>qarn</i> 'to join one thing to another, yoke together'	* <i>n</i> non-finitive	
85. <i>qarīr</i> 'to hiss, whisper secrets'	(none)	* <i>kr</i> 'to utter, make a sound, speak'
<i>qarqar</i> 'to coo, roar, crow, laugh to choking, rumble, grumble'	(reduplicated simple form > intensive)	
<i>qar?</i> 'to read, recite'	* <i>ʔ</i> concisive	
<i>qarθ</i> 'to grieve'	* <i>θ</i> diffusive	
<i>qarḥ</i> 'to cough'	* <i>ḥ</i> iterative	
<i>qarad</i> 'to be speechless'	* <i>d</i> durative	
<i>qardas</i> 'to call to a puppy'	* <i>d</i> durative; * <i>s</i> fortative	
<i>qardam</i> 'stammerer'	* <i>d</i> durative; * <i>m</i> noun suffix	
<i>qarzam</i> 'to make bad verse'	* <i>z</i> intensive; * <i>m</i> fortative	
<i>qarš</i> 'to taunt with epigrams'	* <i>š</i> focative	
<i>qaraq</i> 'to cluck'	* <i>k</i> intensive (effect)	
<i>qaraq</i> 'to deceive'	* <i>k</i> andative (i.e., tell lies <i>to</i> )	
<i>qarqaš</i> 'to decoy or call a dog'	* <i>k</i> andative (i.e., call <i>to</i> ), * <i>š</i> focative	
<i>qarqaš</i> 'to publish, make publicly known'	* <i>k</i> intensive, * <i>ʃ</i> sunderative	
<i>qarað</i> 'to laud, eulogize'	* <i>ð</i> extendative fortative	
<i>qarf</i> 'to tell lies'	* <i>p</i> iterative	
<i>qarm</i> 'to revile, abuse'	* <i>m</i> fortative	
86. <i>qarr</i> 'to stay permanently in a place, dwell quietly, persist'	(none)	* <i>kr</i> 'to sit'
<i>qarfaš</i> 'to sit on the ground with the knees drawn closely to the body and the hands joined in front of them'	* <i>p</i> iterative (> durative); * <i>š</i> focative	
87. <i>qarr</i> 'to drink its fill at a time, be satisfied at a time'	(none)	* <i>kr</i> 'to take a bite or swallow of'
<i>qarab</i> 'to travel through the night in order to get to the water'	* <i>b</i> extendative	
<i>qardab</i> 'to eat all, eat anything dry'	* <i>d</i> durative; * <i>b</i> finitive fortative	
<i>qarz</i> 'to sting'	* <i>z</i> intensive (manner)	
<i>qarš</i> 'to gnaw at'	* <i>t</i> venitive	
<i>qarš</i> 'to sting, prick'	* <i>š</i> focative	
<i>qarð</i> 'to gnaw, nibble'	* <i>ð</i> focative	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>qarqaš</i> 'to gnaw at'	* <i>k</i> intensive (effect); * <i>ʔ</i> venitive	
<i>qarqaʔ</i> 'to gnaw the bit, nibble at'	* <i>k</i> intensive (effect); * <i>ʔ</i> durative intensive (first meaning)	
<i>qarqam</i> 'to feed a child badly'	* <i>k</i> andative (i.e., give food to); * <i>m</i> fortative	
<i>qarm</i> 'to eat; gnaw at, nibble at'	* <i>m</i> fortative	
88. <i>qaršah</i> 'to hop in short leaps'	* <i>ʔ</i> venitive; * <i>h</i> iterative	* <i>kr</i> 'to step'
<i>qard</i> 'to swerve to the right and left in walking, depart from'	* <i>d</i> middle	
<i>qarfaʔ</i> 'to walk with short steps'	* <i>p</i> iterative; * <i>ʔ</i> durative intensive	
<i>qarmaʔ</i> 'to make small steps'	* <i>m</i> fortative; * <i>ʔ</i> durative intensive	
89. <i>qurūt</i> 'to dry up and gather beneath the skin (discolored blood), bruise'	* <i>ʔ</i> durative	* <i>kr</i> 'to spoil, injure, make go bad'
<i>qarḥ</i> 'to wound, cover with ulcers'	* <i>h</i> iterative	
<i>qard</i> 'to die or be on the point of death'	* <i>d</i> middle	
<i>qarad</i> 'to be spoiled, get matted, be attacked by worms'	* <i>d</i> durative	
<i>qaraf</i> 'to be on the point of falling ill'	* <i>p</i> intensive (?)	
<i>qarmaš</i> 'to spoil, ruin'	* <i>m</i> fortative; * <i>ʔ</i> venitive	
90. <i>qarīr</i> 'to be cold, fresh'; <i>qurr</i> 'to suffer from cold, freeze'	(none)	* <i>kr</i> 'to chill'
<i>qarat</i> 'ice, snow'	* <i>ʔ</i> durative (or * <i>ʔ</i> noun suffix)	
<i>qars</i> 'to be intense (cold), freeze, curdle'	* <i>s</i> fortative	
<i>qarmas</i> 'to retire to a hole in the ground (from cold)'	* <i>m</i> fortative; * <i>c</i> non-finitive	
91. <i>qardas</i> 'to fasten, tie up'	* <i>d</i> durative; * <i>s</i> fortative	* <i>kr</i> 'to wind round'
<i>qarzal</i> 'to coil the hair on top of the head, truss up the garment'	* <i>z</i> intensive (manner); * <i>l</i> finitive	
<i>qarṭab</i> 'to render one powerless, bind one's hands'	* <i>ʔ</i> durative intensive; * <i>b</i> finitive fortative	

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Table 39 (cont.)

Related forms	Extension	Reconstructed root
<i>qarfaṣ</i> 'to bind one's hands beneath his feet'	* <i>p</i> intensive; * <i>ṣ</i> focative	
92. <i>nabb</i> 'to be haughty'	(none)	* <i>nb</i> 'to rise, become high'
<i>nabʔ</i> 'to be high, tower over, come upon from above, conquer, surpass'	* <i>ʔ</i> concisive	
<i>nabt</i> 'to germinate, sprout, grow'	* <i>t</i> durative	
<i>nabr</i> 'to raise, elevate, thrive, grow'	* <i>r</i> diffusive	
<i>nabṣ</i> 'to be on the point of sprouting'	* <i>ṣ</i> focative	
<i>nabl</i> 'to surpass in any skill'	* <i>l</i> finitive	
<i>nabh</i> 'to awake'	* <i>h</i> amplificative	
<i>nabγ</i> 'to fly off'	* <i>γ</i> intensive (effect)	
93. <i>nabj</i> 'to creep out of the egg, break forth, flow'	* <i>g</i> durative	* <i>nb</i> 'to bring out'
<i>nabθ</i> 'to dig out with one's hand, clean a well, up-root'	* <i>θ</i> diffusive	
<i>nabṣ</i> 'to uncover, dig out, dig, bring to light'	* <i>ṣ</i> venitive	
<i>nabγ</i> 'to appear, come to light, get known, break forth'	* <i>γ</i> complementive	
<i>nabq</i> 'to spurt out of a wound (blood, pus)'	* <i>k</i> intensive (effect)	
<i>nabð</i> 'to fling out of one's hand, cast, reject, let go'	* <i>ð</i> extendative fortative	
<i>nabw</i> 'to remove, withdraw'	* <i>w</i> inchoative (> tr.)	
94. <i>nabr</i> 'to pierce through and draw the lance back quickly' (second part of meaning shows influence from * <i>nb</i> 'to bring out,' preceding)	* <i>r</i> diffusive	* <i>nb</i> 'to prick'
<i>nabq</i> 'to write'	* <i>k</i> intensive (> durative)	
<i>nabl</i> 'to shoot arrow, throw spears, take as a mark, shoot at, surpass in shooting arrows' (last part of meaning shows influence from * <i>nbl</i> form of * <i>nb</i> 'to rise, become high,' for which see above)	* <i>l</i> finitive	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
95. <i>nabb</i> 'to bleat from rut'	(none)	* <i>nb</i> 'to call, cry'
<i>nabh</i> 'to bark, bellow, hiss'	* <i>h</i> iterative	
<i>nabr</i> 'to shout to, drive away by cries or shouts'	* <i>r</i> diffusive	
<i>nabz</i> 'to give one a nickname, revile'	* <i>z</i> intensive (manner)	
<i>nabš</i> 'to speak'	* <i>š</i> focative	
96. <i>našš</i> 'to boil, bubble, ooze'	(none)	* <i>nš</i> 'to overflow'
<i>našnaš</i> 'to boil, bubble'	(reduplicated simple form > intensive)	
<i>našb</i> 'to gush forth'	* <i>b</i> extendative	
<i>naštj</i> 'to bubble'; <i>nasaj</i> 'aqueduct, canal'	* <i>g</i> durative	
<i>našγ</i> 'to flow'	* <i>γ</i> complementive	
97. <i>našš</i> 'to dry up, be dried up, imbibe, absorb'	(none)	* <i>nš</i> 'to imbibe, absorb, take in liquid, etc.'
<i>našnaš</i> 'to swallow quickly'	(reduplicated simple form > intensive)	
<i>našh</i> 'to drink, water the horses'	* <i>h</i> iterative	
<i>našr</i> 'to blow'	* <i>r</i> diffusive	
<i>našt</i> 'to bite (snake)'	* <i>t</i> durative intensive (here only intensive?)	
<i>nušūš</i> 'to administer medicine by the mouth or nose'	* <i>š</i> sunderative (> andative: motion <i>to</i> mouth / nose)	
<i>našγ</i> 'to drink out of the hand'	* <i>γ</i> complementive	
<i>našaf</i> 'to absorb, imbibe water, sweat, etc., be absorbed, disappear in the ground, be dried, dry up'	* <i>p</i> iterative (> durative)	
<i>našaq</i> 'to snuff up, inhale, smell'	* <i>k</i> intensive (effect)	
98. <i>našš</i> 'to drive (slowly)'	(none)	* <i>nš</i> 'to send away, take away'
<i>našnaš</i> 'to pull off a dress, skin quickly, push and put into quick motion, drive, chase away'	(reduplicated simple form > intensive)	
<i>našr</i> 'to spread out, unfold or unroll, exhibit, spread about, make publicly known, communicate, propagate, separate, dis- perse, be scattered'	* <i>r</i> diffusive	
<i>nušūš</i> 'to be scared up, chased'	* <i>š</i> focative (focussed action is	

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Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
away, pull out, take out, bring out'	'to pull out')	
<i>našŭ</i> 'to go out of, leave a place, drive from place to place'	*ŭ durative intensive (third meaning)	
<i>našz</i> 'to take quickly away, snatch from'	*z extendative (first meaning)	
<i>našŭ</i> 'to take away forcibly, pull out'	*ŭ sunderative	
<i>našf</i> 'to depart, disappear, set'	*p intensive (manner: go completely away)	
<i>našl</i> 'to pull quickly out, draw to one's self, snatch meat out of the kettle with the hand'	*l finitive	
99. <i>našʔ</i> 'to grow, grow up, be brought up, rise, hover high'	*ʔ concisive	*nŭ 'to rise'
<i>našr</i> 'to put forth leaves, grass to sprout forth, raise the dead, revive, be revived, rise from the dead'	*r diffusive	
<i>našz</i> 'to be situated or placed on high, rise high, rise from a place'	*z intensive (manner)	
<i>nušūš</i> 'to be long, protrude' ( <i>nasis</i> 'erect')	*š focative	
<i>nušūz</i> 'to spring forth from the ground, sprout'	*z extendative	
<i>nušuŭ</i> 'to recover from a dangerous illness'	*ŭ sunderative (i.e., rise from illness or from sickbed)	
<i>našl</i> 'to lift up'	*l finitive	
100. <i>našš</i> 'to hiss'	(none)	*nŭ 'to make a low sound'
<i>našij</i> 'to sob or cry in a subdued manner; cry out repeatedly, quack, trill'	*g durative	
<i>inšād</i> 'to recite verses, conjure by the name of God, praise, glorify'	*d durative	
<i>našŭ</i> 'to sob, hiccough, emit a death rattle'	*ŭ sunderative ('emit')	
<i>našy</i> 'to sob, hiccough'	*y extendative fortative	
101. <i>našr</i> 'to cut or carve wood, saw'	*r diffusive	*nŭ 'to cut'
<i>nušūš</i> 'to pierce'	*š focative	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
102. <i>našš</i> 'to mix' <i>nažz</i> 'to be agitated, excited' <i>nušūš</i> 'to be excited, agitated' <i>našw</i> 'to be giddy from wine'	<i>*z</i> intensive (manner) <i>*š</i> focative <i>*w</i> inchoative	<i>*nš</i> 'to stir, stir up'
103. <i>našb</i> 'to adhere firmly, be fastened to, stick in' <i>našt</i> 'to make a knot in a rope or tie it by a knot when broken' <i>našaq</i> 'to be caught in a noose'	<i>*b</i> extendative <i>*t</i> durative intensive <i>*k</i> intensive (effect)	<i>*nš</i> 'to fasten'
104. <i>našh</i> 'to deteriorate, putrify' <i>našar</i> 'to have the mange' <i>našam</i> 'to be covered with black and white spots or dots' (presumably originally descriptive of spread of mold, etc.); <i>tanšim</i> 'to putrify, rot'	<i>*h</i> iterative (> durative) <i>*r</i> diffusive <i>*m</i> fortative	<i>*nš</i> 'to decay, rot'
105. <i>hamj</i> 'to drink its fill at once (camel)' <i>hamz</i> 'to sting, bite' <i>hams</i> 'to chew without opening the mouth' <i>hamš</i> 'to bite' <i>hamš</i> 'to eat' <i>hamt</i> 'to swallow all' <i>haml</i> 'to pasture at large day and night'	<i>*g</i> finitive fortative <i>*z</i> intensive (manner) <i>*c</i> non-finitive <i>*š</i> venitive <i>*š</i> focative <i>*t</i> durative intensive <i>*l</i> finitive (thoroughness of action)	<i>*hm</i> 'to take into the mouth (food or drink)'
106. <i>hamt</i> 'to disappear' <i>hamj</i> 'to dispatch (well or badly)' <i>hamz</i> 'to urge on, spur on, goad' <i>hams</i> 'to travel without interruption' <i>hamš</i> 'to gather' <i>hamt</i> 'to take all, take forcibly, plunder' <i>hamk</i> 'to press, urge on' <i>haml</i> 'to leave undone, neglect, forget' <i>hamlaj</i> 'to go steadily and gently'	<i>*t</i> durative <i>*g</i> finitive fortative <i>*z</i> intensive (effect) <i>*c</i> non-finitive <i>*š</i> venitive <i>*t</i> durative intensive <i>*k</i> durative <i>*l</i> finitive <i>*l</i> finitive; <i>*g</i> durative	<i>*hm</i> 'to go away, send away'

# ORIGIN OF THIRD CONSONANTS

Table 39 (cont.)

Related forms	Extension	Reconstructed root
<i>hamlaq</i> 'to step apace, hasten'	* <i>l</i> finitive; * <i>k</i> intensive (i.e., go away <i>quickly</i> )	
107. <i>hamm</i> 'to melt fat'	(none)	* <i>hm</i> 'to seep, flow'
<i>hamr</i> 'to pour out, shed'	* <i>r</i> diffusive	
<i>hamʕ</i> 'to shed tears, cry, flow, drop'	* <i>ʕ</i> sunderative	
<i>haml</i> 'to be bathed in tears, shed tears in profusion, flow, rain steadily and uniformly'	* <i>l</i> finitive (as a marker of action thoroughly or fully carried on) or */modifier suffix	
<i>hamw</i> 'to flow'	* <i>w</i> inchoative	
<i>hamy</i> 'to flow, run, shed tears, overflow'	* <i>y</i> inchoative	
108. <i>hamr</i> 'to paw the ground violently'	* <i>r</i> diffusive	* <i>hm</i> 'to press with the hand'
<i>hamz</i> 'to press in the hands, in the claws, press down'	* <i>z</i> intensive (manner)	
<i>hams</i> 'to press out'	* <i>s</i> fortative	
<i>hamš</i> 'to milk in a certain way'	* <i>ʃ</i> venitive	
109. <i>hamʔ</i> 'to use up or tear a garment'	* <i>ʔ</i> concisive	* <i>hm</i> 'to tear, rend'
<i>hamd</i> 'to be worn out, rent'	* <i>d</i> durative (> stative)	
<i>hams</i> 'to break'	* <i>s</i> fortative	
<i>hamɣ</i> 'to break one's skull'	* <i>ɣ</i> intensive (effect)	
110. <i>hamz</i> 'to beat, push back with a blow'	* <i>z</i> intensive (manner); second meaning may be influenced by 108 above	* <i>hm</i> 'to strike'
<i>hams</i> 'to give one a blow, a thrust'	* <i>s</i> fortative	
<i>hamʔ</i> 'to beat violently, kick'	* <i>ʔ</i> durative intensive	
111. <i>hamham</i> 'to murmur in a low voice, mumble, groan, bellow, lull to sleep by humming'	(reduplicated simple form > intensive, durative)	* <i>hm</i> 'to speak in a quiet voice'
<i>hamr</i> 'to make many words, be prolix, neigh'	* <i>r</i> diffusive	
<i>hamraj</i> 'to talk confusedly'	* <i>r</i> diffusive; * <i>g</i> durative	
<i>hams</i> 'to mumble'	* <i>c</i> non-finitive	
<i>hamʔ</i> 'to talk at random'	* <i>ʔ</i> durative intensive	
<i>hamz</i> 'to slander'	* <i>z</i> intensive (manner)	
112. <i>hamīm</i> 'to creep, crawl'	(none)	* <i>hm</i> 'to lower, put low'
<i>humūd</i> 'to go out (fire), die, subside, calm down'	* <i>d</i> durative	

Table 39 (cont.)

<i>Related forms</i>	<i>Extension</i>	<i>Reconstructed root</i>
<i>hamš</i> 'to throw down, over-power and kill'	*š focative (> intensive)	
<i>hamy</i> 'to fall, lower'	*y inchoative	

## 6

## The Extensions in a Historical Context

A very large body of evidence has been adduced that is compelling in its overall implication that the third consonants of Semitic trilaterals originated as suffixes, most often as verb extensions. It is also consistent in what it implies regarding the earlier meanings of particular third consonants. Thirty-seven extensions can be identified by internal reconstruction:

1. \*d middle voice extension
2. \*h amplificative
3. \*w inchoative / denominative
4. \*y inchoative / denominative
5. \*γ complementive
6. \*k andative
7. \*ʕ sunderative
8. \*ʔ venitive
9. \*š focative
10. \*θ diffusive
11. \*r diffusive
12. \*k finitive
13. \*l finitive
14. \*b finitive fortative
15. \*g finitive fortative
16. \*c non-finitive
17. \*n non-finitive
18. \*b extendative
19. \*z extendative
20. \*p iterative
21. \*h iterative
22. \*g durative
23. \*k durative
24. \*d durative

## ORIGIN OF THIRD CONSONANTS

25. *\*t* durative
26. *\*ʔ* concisive
27. *\*x* precipitive
28. *\*p* intensive (of manner)
29. *\*z* intensive (of manner)
30. *\*ɣ* intensive (of effect)
31. *\*k* intensive (of effect)
32. *\*t* durative intensive
33. *\*s* fortative
34. *\*m* fortative
35. *\*ð* extendative fortative
36. *\*x* extendative fortative
37. *\*s* causative

Several fossil nominalizing suffixes also appear to be present among the third consonants of Semitic roots. Five noun suffixes, probably originally deverbatives of various kinds, in *\*w*, *\*r*, *\*l*, *\*n*, and *\*m* (tables 3a, 11a, 13a, 17a, and 34a), and three modifier-forming suffixes, in *\*r*, *\*l*, and *\*n* (tables 11b, 13b, and 17b), have been proposed here. PS *\*klb* 'dog,' among others, probably contains in C<sub>3</sub> position a sixth noun suffix, *\*b* animate, as proposed by Diakonoff (1965: 55–56 note 3). The same suffix appears as a deverbative forming nouns for parts of the body in Cushitic (Section 1). Another suffix, in *\*t*, in both noun- and adjective-deriving versions, occurs in Cushitic and can be suspected to account for some C<sub>3</sub> in Semitic (e.g., Arabic *qarat* 'ice, snow' in table 39: 90 is a possible example), although the case for it has not been argued here. Still another older Afroasiatic suffix, an attributive in *\*y* known also from Cushitic, has remained productive in Semitic (cf. Arabic *\*-yy-*).

A majority of the reconstructible extensions can be paired with another having apparently parallel function. There are two inchoative/denominatives, two diffusives, two finitives, and so forth. The functional significance of these pairings was probably that they allowed circumvention of consonant co-occurrence constraints. Such constraints appear to have been old in Afroasiatic: they are highly visible in Semitic root patterns and can be seen to have operated, in different versions, in Cushitic as well. The existence of two iteratives meant, for instance, that where co-occurrence constraints blocked the application of one of them, then the other could be applied in its stead.

The functions identified for the various extensions, as noted, can be projected back presumably to pre-Proto-Semitic. But meaning shifts affect affixes as well as stem morphemes, and for still earlier periods in the evolution of the Afroasiatic family the meanings of the particular extensions may often have been somewhat

different. The linking of the *\*m* fortative inferred from Semitic C<sub>3</sub> with the Cushitic *\*m* intransitive has already been argued above. In other cases, the function of an extension may have changed little if at all, as the comparison of the *\*d* middle voice of Semitic C<sub>3</sub> with the Eastern Cushitic *\*d'* middle voice extension illustrates.

Some of the C<sub>3</sub> represent a falling together of formerly distinct Afroasiatic consonants, and hence—as was suggested early in this article—some C<sub>3</sub> which in their Semitic manifestations can impart two disparate semantic effects actually conflate two once separate extensions. The comparative evidence from outside Semitic is as yet sparse, but from the Cushitic data some tentative suggestions can be made as to which extension meaning might go with which earlier Afroasiatic consonant. The contrast of Proto-Cushitic (PC) *\*g<sup>w</sup>arp-* ‘to cut off’ and *\*karf-/ \*kirf-* ‘to turn around’ would seem to indicate that *\*p* intensive of manner (28) comes from PAA *\*p* (PC *\*p*), while *\*p* iterative (20) derives from PAA *\*f* (PC *\*f*). The association of Cushitic *\*b* with extended action, for example, in Proto-Southern Cushitic (PSC) *\*humb-* ‘to crouch’ (from the root seen also above in table 39: 112) and PC *\*warb-* ‘to hold water,’ implies that extendative *\*b* apparent in Semitic C<sub>3</sub> can be reconstructed as PAA *\*b*. The alternative function of *\*b* as a finitive fortative presumably derives from the fourth and last remaining PAA oral labial, *\*p'*, but the two known Cushitic roots with *\*p'* in C<sub>3</sub> position, PC *\*ginp'-* ‘heel’ and *\*gamp'-* ‘to be dark’ (Ehret 1987), do not provide clear support for this otherwise plausible proposal.

The double function of each of the PS velars in C<sub>3</sub> position can similarly be laid to the falling together of the PAA velar and labialized velar series in Semitic. The example, already noted, of PC *\*c'of-* ‘to leak, seep’ and *\*caf<sup>k</sup>-* ‘to soak,’ indicates that *\*k* intensive can be traced to non-velar PAA *\*k'*. Other Cushitic cases, such as PC *\*walk'-* ‘to stir (intr.)’ and PSC *\*funk'-* ‘to trot,’ suggest that in its original form *\*k'* may have implied duration rather than intensity, however. PC *\*k* occurs as the third consonant of roots consistently indicative of extended movement, for example, PC *\*hink-* ‘to move,’ PSC *\*lank-* ‘to dash about, flit,’ and *\*wirik-* ‘to turn about.’ The *\*k* durative of Semitic C<sub>3</sub> can thus be identified with PAA *\*k*. The contrast of PC *\*ʔazz<sup>w</sup>-* ‘to chew’ and *\*farx-* ‘to make a hole’ (Ehret 1987) most probably supports the derivation of pre-PS *\*x* extendative fortative from earlier PAA *\*x<sup>w</sup>*—chewing being an inherently extended action—and the attribution of *\*x* precipitive to non-labial PAA *\*x*. By a process of elimination, *\*k* finitive would seem attributable to PAA *\*k<sup>w</sup>*, and *\*k* andative to PAA *\*k<sup>w</sup>*; but, unfortunately, direct evidence for these propositions is as yet lacking. Data allowing the allocation of *\*g* finitive fortative and *\*g* durative among PAA *\*g* and *\*g<sup>w</sup>* and of *\*γ* complementive and *\*γ* intensive of effect among PAA *\*γ* and *\*γ<sup>w</sup>* are also insufficient at present.

## ORIGIN OF THIRD CONSONANTS

One further case of the collapsing of two PAA consonants as one in Semitic is provided by PS \*s, which combines PAA \*s and \*s' (PC \*ts'). The evidence of Cushitic shows that the \*s causative preserves original PAA \*s. This identification leaves PAA \*s' unaccounted for and therefore a plausible candidate for the source of the \*s fortative extension. No cases of PC \*ts' in third-consonant position are known as yet, however, and so again direct evidence for the suggestion cannot be adduced.

### 7

## Historical Overview

The morphological history that can be proposed from the materials presented here is unusual but not especially complicated. Early on in the evolution of the Afroasiatic language family, all or nearly all of the consonants of PAA had developed the capacity to act as verb extensions, modifying the meaning of simple biconsonantal roots in regularly definable ways. In Cushitic and Chadic many of these extensions became nonproductive during the evolution of the mother languages of those branches of the family and before the ends respectively of the Proto-Cushitic and Proto-Chadic periods, probably well before. Relatively few of the extended roots containing these suffixes became lexicalized and maintained as distinct roots; in Proto-Cushitic they probably constituted 10–15 percent of the vocabulary. In the evolution of Egyptian, Berber, and Semitic, however, these extensions must have remained productive for a longer period, so that when they finally ceased to be active elements of morphology, a much larger proportion of the vocabulary in those three came to be lexicalized extended roots. In Semitic this process was carried the furthest, the outcome being a system in which the great majority of verb roots were of such origin. Verbal morphology presumed a triliteral surface of contact with the verb root. In consequence, the remaining biconsonantal verbs were converted formally into triconsonantals by a morphologically rather than semantically motivated gemination of the second consonant.

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NOTE: A copy editor modified in one further respect the glosses directly quoted from Steingass, specifically by changing Steingass' semi-colons to commas.

The writer is not responsible for this often sense-obscuring alteration of quoted material.

# GENDER IN OMOTIC

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**ABSTRACT** *Omotic consists of groups 01-02 (Ometo, North and South), 03 (Chara), 04 (Gimira), 05 (Yemsa), 06 (Kefoid), 07 (Dizoid), 08 (Mao), and 09 (Aroid). Gender marking is weak in Omotic, largely restricted to 3sg. pronouns and verb concords, demonstratives, and sex-gender morphemes used with nominals. Omotic nouns have terminal vowels (TVs) chosen from i, e, a, o, u, or lack TVs in various patterns according to groups. Both the usual Omotic gender morphemes (notably m. nonpalatal/f. palatal in pronouns, m. -o/f. -e in Kefa-Mocha nouns, f. -ta, -to, -tu in Kullo-Konta nouns) and the selection of TVs are paralleled in Cushitic. The best explanation is that the Afrasian phylum has a Cushomotic node, but not that Omotic is a subgroup of Cushitic. Cross-cutting isomorphs within Omotic are 07 and 09 sharing f. -n (shared innovation?), while 05, 06, 07 have no palatal TVs as against 01-02, 03, 08, 09, which have all but -u as TV. Group 04 (Gimira) has innovated a rich tonal system and no TVs. One must weigh this against lexicon which makes 09 appear most divergent followed by 08 and 07. The old dichotomy of 09 (South Omotic) versus all the rest (North Omotic) appears to be too simplistic.*

## I

### Introduction

It has long been noted that gender marking is weak in Omotic languages (even when these languages were still referred to as “Sidama” or “West Cushitic”; see Fleming 1976a:36). Nevertheless traces are found both in nominal and verbal inflection. Table 1 summarizes these for representative Omotic languages.<sup>1</sup>

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For answering a questionnaire on gender I sent them, I am grateful to Robert Hetzron (Awngi), Loren Bliese (Afar), Grover Hudson (Highland East Cushitic), and Rainer Vossen (East Nilotic). Of course, none of these is responsible for any error in interpretation I may have committed.

<sup>1</sup> For the purposes at hand, Omotic is considered to be one of about seven coordinate branches of the Afrasian (= Afroasiatic) Phylum, which consists of Ancient Egyptian, Berber, Semitic, Beja, Cushitic, Omotic, and Chadic. The splitting off of Beja from Cushitic is advocated by Hetzron (1980). Grover Hudson has expressed the opinion that the rest of Cushitic may also really be several coordinate branches of Afrasian. As for subgrouping the Afrasian families, the opinion was unanimously expressed by the participants in the Afroasiatic group at the Workshop on Linguistic Change and Problems of Reconstruction Methodology (Linguistic Society of America Summer Institute, Stanford, July 28–August 1, 1987) that none is possible in our present state of knowledge.

*Table 1*  
*Gender in Ometo*

		<i>01: North Ometo</i>					<i>01b:</i>	<i>01c:</i>
		<i>01a: Welaita cluster</i>					<i>Oyda</i>	<i>Basketo</i>
		<i>Welaita</i>	<i>Gofa</i>	<i>Kullo</i>	<i>Konta</i>			
Case	Nom.	-i, y, wi	-i, y prn. -ni	-i prn. -ni				prn. -ni
	Acc., Abs.	-a	prn. -na	-n prn. -na				-n prn. -na
TVs of Nouns in % (- means no TV)		Dorzé: 97 items <sup>1</sup> e: 27 a: 37 o: 18 -: 13	105 items e: 18 a: 62 o: 18	104 items a: 92	80 items a: 84	93 items e: 22 a: 28 o: 18 -: 26		117 items i: 14 e: 7 a: 35 -: 44
Noun gender <sup>2</sup>	M.		by vb. concord	unmarked				
and plural	F.	-(a)yo -(i)ya	occ. -iya, e, o	-to, -tu, -ta <sup>3</sup>	-tu <sup>3</sup>			
	Pl.	-ta	ø, -ti -(an)ta	ø, -(a)tu				-ənts
Pronoun gender m./f. in nom., acc., or obj., gen., verb concord		nom. a/o i/a 3 sg. vb., i/a e/au	nom. i/i(ya) nom., acc., iya/iyo vb. e/au, i/a	nom. i/a, bē/i obj. a/eu gen. a/i vb. e/au i, e/a, a/u		nom. ø/a		nom. a/i s/z y/z
Demon. gender m./f.		hage/anno, anni pl. a/e	ha(ge)/hana pl. ā/ē	a/e				sək-/yet-
Sources <sup>4</sup>		Cerulli 1929 Chiomio 1938 da Luchon 1938	Cerulli 1929 Moreno 1940					Cerulli 1938

<sup>1</sup> Dorzé was substituted for Welaita in order to make use of a North Ometo language that is not so closely related to Gofa.

<sup>2</sup> By noun gender in this case is meant either special morphemes as indicated by various investigators or possible "built-in" lexical marking. The possible existence of the latter is the main object of this paper.

<sup>3</sup> By the well-known Afrasian gender-number "polarity" feminine sg. often serves also as pl. This is especially noticeable here in Ometo (01 and 02). The items found in Kullo-Konta that were

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Table 1 (cont.)

		02: South Omoto				
		Old: Malé	Zaysé	Koré	Gat'amé	Ganjulé
Case	Nom.	prn. -ni	-i, y prn. -y	-i, y prn. -ni		
	Acc., Abs.	prn. -na		∅ prn. -mba	∅	
TVs of		118 items	109 items	112 items	(Fully	75 items
Nouns in %		i: 53	e: 28	e: 37	comparable data	i: 13
(- means		e: 17	a: 24	a: 27	not available; one	e: 19
no TV)		a: 14	o: 27	o: 16	could use Conti	a: 21
		o: 13	-: 17	i ~ e: 13	Rossini 1936)	o: 16
		(No -u in language)		(No -i, -u in language)		-: 28
Noun gender <sup>2</sup>	M.			by vb. concord	-ā	
and plural	F.			by vb. concord	-iyô	
	Pl.		-(i)ri trace -ti	-ita, -itte archaic, (kin: -atse)	∅	
Pronoun gender m./f. in nom., acc., or obj., gen., verb concord		nom. i/a acc., gen. a/o neut. ebi	nom. iya/isa gen. (b)ɛ/i vb. s/ʃ	nom., acc. gen. vb. e/i vb. s/n nom. vb. (b)e/i	nom. i/e, o	
Demon. gender m./f.				e/i a/e	hega, hini /heno	
Sources <sup>4</sup>			Cerulli 1938	Hayward 1982, 1987	Conti Rossini 1936	

elicited with *-to*, *-tu* are as follows: 'girl' *macanato*/*macenata*,*o*, 'hen' *kutua*/*kutwΛ*, 'mother' *aatu*/*at*, 'sister' *micato*/*micetu*, 'woman' *mišerato*/*'wife'* *matšetu*, 'cat' *gabarata*/*gabaretu*, 'turtle' *gegia*, *gegato*/*gege*. Of course it is quite likely that the last two of these were simply given by the informant as feminine and that a nonsuffixed masculine may exist (but see discussion in 2.2.2).

<sup>4</sup> In addition to the published sources listed, the following unpublished sources were consulted: Bruce Adams, Welaita; Edward Allen, Kullo, Dizi; Atieb Ahmed Dafallah and M. L. Bender, Hozo, Sezo, Bambeshi; M. Lionel Bender, Ari, Dizi, Sheko, Anfillo, Bworo, Malé; Mary Breeze, Dizi, Bensho, She; Donald Donham, Malé; Harold Fleming, Ari, Dimé, Hamer, Dizi, Sheko, Nao, Kefa-Mocha, Anfillo, Bworo, Bensho, Shé, Nao, Chara, Malo-Zala, Oyda, Gidi-

Table 1 (cont.)

		03: Chara	04: Gimira Bensho	05: Yemsa Shé	06: Kefoid Bworo	Anfillo
Case	Nom.		-i <sub>3</sub> , -a <sub>3</sub>	-(t)u (?)	m.: -a f.: -ni	
		prn. -ni				
	Acc., Abs.	∅	-is <sub>3</sub>	-ni prn. -n	-a prn. -n	
TVs of nouns		115 items a: 97	116 items -: 97	95 items -: 93	112 items <sup>5</sup> a: 63 o: 15 u: 11 -: 9	118 items a: 81 o: 16
						98 items o: 97
Noun gender <sup>2</sup> and plural	M.		modifier: -näs <sub>4</sub>	hi tone or mod. atka	unmarked or hi tone	
	F.		modifier -nin <sub>4</sub>	lo tone or mod. maška	-u or lo tone	
	Pl.	∅	-nd <sub>3</sub>	m.: -askiʔo f.: -skiʔo	duplic.; -otsi	
Pronoun gender m./f. in nom., acc., or obj., gen., verb concord	nom.	nom., gen., acc., vb. gen. e/a yi(s)/wu(s) 2 sg. (?) j/∅, ts		nom., gen. hi/lo tone vb. af. 2d person -á/-è 3d: -é/-à	nom., gen. hi tone /lo tone vb. e/a, a/i	
Demon. gender m./f.		haš <sub>2</sub> /han <sub>2</sub> uš <sub>2</sub> /en <sub>2</sub>			hi tone /lo tone agent: k/s	
Sources <sup>2</sup>		Cerulli 1938	Conti Rossini 1925 Breeze 1986	Cerulli 1938 Fissiha Hailu 1984 Girma Mammo 1986	Plazikowsky- Brauner 1950 Grottanelli 1941	

cho, Gat'amé, Basketo, Konta; Wendy James, Ganza; James Keefer, Dizi; Herbert Lewis, Kefa-Mocha, Malé; Jean Lydall, Hamer; Franz Rottland, Bworo; Dennis Tully, Ari; Klaus and Charlotte Wedekind, Yemsa, Bensho, Shé.

<sup>5</sup> In a count of 134 nouns, Fissiha (1984) found: -a 68%, -o 24%, -u 7%. The agreement with my results is quite high, considering all the possibly disturbing variables involved.

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Table 1 (cont.)

		<i>Kefa</i>	<i>Mocha</i>	<i>07: Dizoid</i> <i>Dizi</i>	<i>Sheko</i>	<i>Nao</i>
Case	Nom.	∅ -y for emph.		usu. ∅ rel. -i (?)		
	Acc., Abs.	opt. -n prn. -n		obj. s, rel. -a (?) prn. -n		-prn. š (i.o.)
TVs of nouns		113 items o: 96	117 items o: 93	104 items i: 15 u: 38 -: 41	101 items i: 11 a: 1 o: 10 u: 31 -: 37	86 items a: 15 u: 35 -: 41
Noun gender <sup>2</sup> and plural	M.	-o	-o	-a, ʌ, -u		
	F.	-e	-e	-e(n), -in		
	Pl.	duplic. + -i m.: -naʔo f.: -niʔo		-el (?) -k'ankas <sup>6</sup>		
Pronoun gender m. / f. in nom., acc., or obj., gen., verb concord		nom. bii, aro / are gen. bii- / aree- vb. e, i / a, enieta		nom., acc. z / ž vb. -na / ni, -go / ge	nom. ∅ / ʌ nom., gen. az / iž vb. ɔɔ / ii	nom. ∅ / ʌ 2 sg. n / t (?)
	Demon. gender m. / f.			a / en	as / ekani	sas / me sokas / ye
Sources <sup>2</sup>		Cerulli 1951 Reinisch 1888	Leslau 1958, 1959	Allan 1976 Chiomio 1941 Toselli 1939		Conti Rossini 1925

<sup>6</sup> Dizi has m. adj. pl. -da, f. adj. pl. -nen.

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Table 1 (cont.)

		08: Mao Hozo	Sezo	Bambeshi	09: Aroid Ari	Hamer	Dimé
Case	Nom.	-š (??)					
	Acc., Abs.	prn. -tɛ (obj.)	-tɛ	ko (??)	opt. -m ? prn. -k-	-(d)am prn.: -(d)am	-m
TVs of nouns		118 items i: 60 e: 9 a: 25 Final -o, -u rare in languages	116 items i: 73 e: 10 a: 8	109 items i: 7 e: 61 a: 22 (-u rare in language)	117 items i: 51 a: 33 -: 13	95 items i: 47 a: 20 o: 12 -: 16	112 items e: 21 o: 15 u: 23 -: 33
Noun	M.				ø	-(t)a	mod. -oβ
gender <sup>2</sup> and plural	F.					-(to)no	mod. -und
	Pl.	-o, -go; -toka 'head'	-ø, -k'o, -anse, -ime -tɔwi, 'head'	-ɔ(h)le	-i(e)/na, ø	-na	-afis
Pronoun gender m./f. in Nom., Acc., or Obj., gen., verb concord		Acc., Gen. aa-/ɛɛ-			nom. no/na acc., gen. ki-/ko-	nom. -i/o (?)	nom. nu, no/na gen., acc. ki-/ko- vb. nu/na 2 sg. ø/t (?)
Demon. gender m./f.							
Sources <sup>2</sup>		Grottanelli 1946 Bender 1975, 1985, forthcoming				Lydall 1976	

Paul Newman (1980) examined gender of selected nouns across Afrasian and found that even where lexical replacement occurs, gender assignment is surprisingly persistent. For example (Newman 1980:20), 'blood' is always m., even though it has such diverse exponents as *ahni* (Twareg), *\*bar* (Proto-Chadic), *boy* (Beja), *diig* (Rendille), *snf* (Egyptian), *dam* (Hebrew). This suggests that a search for such traces in Omotic may be worthwhile: even if explicit nominal marking is not found, agreement (e.g., with 3d-person verb forms) may provide the answer.

Compared to other Afrasian families, in Omotic gender is rare. Nevertheless, gender distinctions occur with pronouns and verb concord, nouns, demonstratives (in decreasing order of frequency as given). A summary is found in table 2, in which nominative and accusative case marking and noun terminal vowels (TVs; see Hayward 1987:215) are also included because of their relevance to the problem at hand. In this paper, I assume the classification of Omotic languages presented in Bender 1988.<sup>2</sup>

#### I. I. HAYWARD'S ANALYSIS

In an important paper, Hayward (1987) looks at terminal vowels in a number of Omotic languages, beginning with Welaita and Zaysé (based on his own notes on Zaysé and Gofa and material collected in 1982 on Welaita by Bruce Adams). He expands to Koré and Malé (his own Koyra and Maale material), and further to Chara (Cerulli 1938) and Basketo (Harold Fleming field notes). Going outside Omoto, Hayward also looks at Gimira (Bencho or Benchnon, supplied by Mary Breeze) and Dizi (Allan 1976), and also mentions Kefa (Cerulli 1951; Fleming 1976b).

Hayward's analysis is that Omoto originally had TVs-*i*, *e*, *a*, *o*, but not *-u*, the latter lacking because *-u* also served as nominative marker. The gender-distiguishing m. *o* / f. *e* of Kefa-Mocha is a later development under Cushitic influence.

<sup>2</sup> The classification is as follows (most main varieties listed):

1. Aroid: Ari, Hamer, Dimé
2. (non-Aroid)
- 2.1. Dizoid (Dizi, Sheko, Nao)
- 2.2. Mao (Hozo, Sezo, Bambeshi, Ganza)
- 2.3. (what remains)
- 2.3.1. Yemsa (i.e., "Janjero")
- 2.3.2. Kefoid (Bworo, Anfillo, Kefa-Mocha)
- 2.3.3. Gimira-Chara-Omto
- 2.3.3.1. Gimira (Bensho, Shé)
- 2.3.3.2. Chara-Omto
- 2.3.3.2.1. Chara
- 2.3.3.2.2. Omto

01: North: (a) Welaita, Gofa, Dorzé, Kullo-Konta, etc., (b) Oyda; (c) Basketo-Doko-Dolo, (d) Malé; 02: South: Zaysé, Koré, Ganjulé, etc.

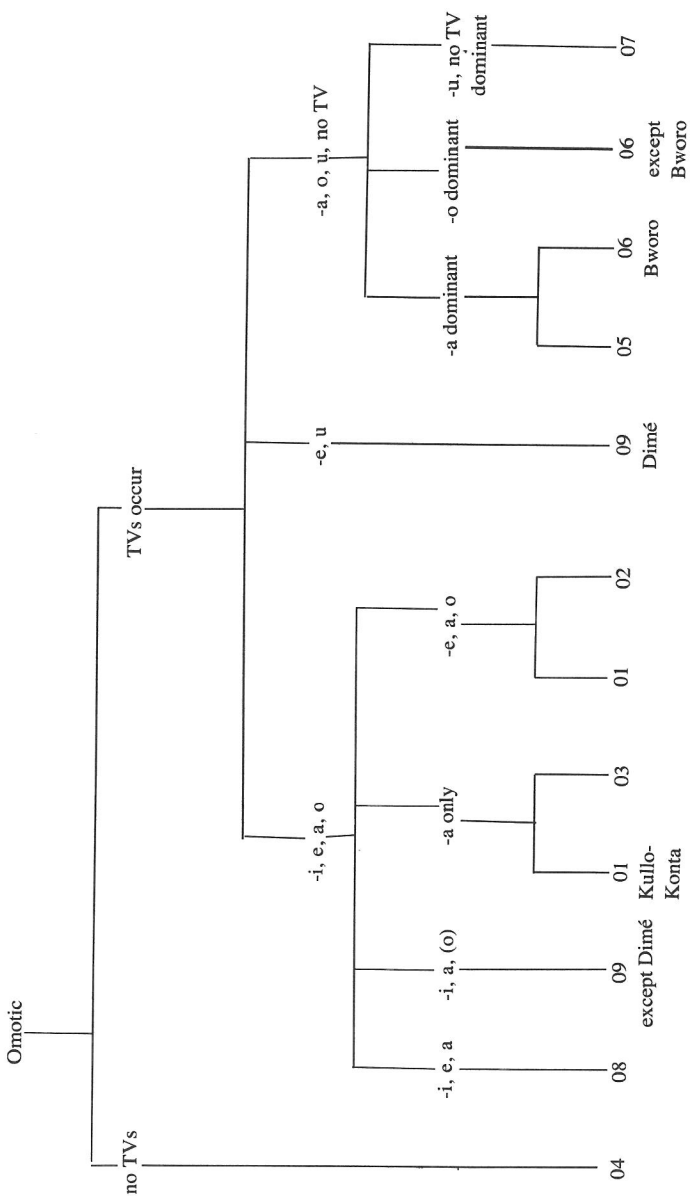
*Table 2*  
*Summary of main TVs in Omotic*

<i>01a</i> <i>Gf.</i>	<i>Dr.</i>	<i>Kl.</i>	<i>Kn.</i>	<i>01b</i> <i>Oy.</i>	<i>01c</i> <i>Bs.</i>	<i>01d</i> <i>Ml.</i>	<i>02</i> <i>Zy.</i>	<i>Ko.</i>	<i>Gn.</i>	<i>03</i> <i>Ch.</i>	<i>04</i> <i>Bn.</i>	<i>Še</i>	<i>05</i> <i>Ym.</i>
					<i>i</i>	<i>i</i>			<i>i</i>				
<i>e</i>	<i>e</i>			<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>e</i>				
<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>			<i>a</i>
<i>o</i>	<i>o</i>			<i>o</i>		<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>				<i>o</i>
													<i>u</i>
										–	–	–	–
<i>06</i> <i>Bw.</i>	<i>An.</i>	<i>Kf.</i>	<i>Mo.</i>	<i>07</i> <i>Dz.</i>	<i>Sh.</i>	<i>N.</i>	<i>08</i> <i>Hs.</i>	<i>Sz.</i>	<i>MB</i>	<i>09</i> <i>A.</i>	<i>Hm.</i>	<i>Dm.</i>	
				<i>i</i>	<i>i</i>		<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>i</i>		
							<i>e</i>	<i>e</i>	<i>e</i>			<i>e</i>	
<i>a</i>					<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>		
<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>		<i>o</i>						<i>o</i>		
				<i>u</i>	<i>u</i>	<i>u</i>						<i>u</i>	
				–	–	–				–	–	–	(no TV)

Note: For language names, see table 1. Italic TVs are the most frequent ones; in 02 Ganjule and 09 Dimé, no TV is most frequent; in 07, *u* and no TV are about equally frequent.

Gender in Omotic nouns is always sex gender; there is no sign of the remains of a true lexical gender system. Other than in Bworo, TV *-u* occurs in Omoto only in numerals. There are some items for which TVs are in full agreement between Welaita and Zaysé (30 such are listed on pp. 217–18) and others for which they differ (49 out of 153, *ibid.*:218). The degree of agreement is much higher between closely related languages or dialects (e.g., Zaysé-Koré, Welaita-Gofa).

In my wider examination of Omotic data, I used Hayward's forms where available, but substituted Gofa for Welaita because I have data on Gofa (Hayward agrees that Welaita and Gofa are dialectally related; *ibid.*:218, 221).



## Examination of Table 1

## 2.1. GENDER IN THE PRONOUN AND DEMONSTRATIVE SYSTEMS

To gain a baseline for the examination of gender in Omotic, let us begin with pronouns, where some gender marking undeniably exists. This is restricted to third person singular except for a suggested trio of forms 2m.sg. *?anji*, 2f.sg. *aana*, *atsine* in 03 Chara, 2m.sg. *ne*, 2f.sg. *yeta* in 07 Nao, and 2m.sg. (or common) *yá(ai)*, 2f.sg. *ayto* (rare in 09 Dimé). The only suggested neuter form is 3nt.sg. *ebi* in Old Malé. All these are from Fleming's field notes (except Malé from Donham notes). It is interesting that in these four cases, *-t(s)-* shows up for feminine and *-b-* in 3d person, both of which are reasonable expectations in Afrasian terms (e.g., *-t-* is probably Proto-Afrasian feminine and *b* occurs in 3d person in Ola Kullo, 02 Zaysé, Koré, 06 Kefa).

New data from the B.A. thesis of Girma Mammo (1986) show 05 Yemsa 2d person verb affix m. *-á/f.* *-è* and 3d person m. *-é/f.* *-à*. This is curious indeed: high/low consistently marks m./f. in Yemsa, but *e/a* polarizes from 2d to 3d person. If the process was *\*ku/ti*  $\Rightarrow$  *-o/i*  $\Rightarrow$  *a/i*, how did high tone get attached to the low vowel *a* and low tone to the mid vowel *e*? Note that m. hi/f. lo also occurs in 06 Bworo: convergence or strong argument for subgrouping?

Otherwise, as summed up in Bender (forthcoming), there is a possible Proto-Cushomotic<sup>3</sup> gender-marking pair *\*k<sup>w</sup>/ti* (see also Hetzron 1980:18–21). This may be reflected in vowel pairs *o/i* or *o/e* in 06 Kefa and polarized to *i/o* or *e/o* in 01, 02, 04 (as *yi/wu*, *u/e* in 'that'), 07, 09. A fairly natural shift to one or more of *a/i*, *a/e*, *e/a*, *i/a* is seen in every group except 04 (but found in noun modifiers, see 2 below) and 09.<sup>4</sup> The less natural shift to *a/o,u* or *o,u/a* is seen in 01, 02, 06, 09 (perhaps  $\emptyset/wa$  of 05 belongs here or with *i/o*?). An even less natural shift is to *i/e* or *e/i*, found in 01 Kullo and 02 only (Kefa *e,i/a*, *eni*, *eta* is hard to interpret).

As for consonants, Cushomotic *k/t* shows up only in 01c Basketo demonstrative

<sup>3</sup> By Cushomotic I mean an assumed node uniting Cushitic and Omotic as a lower-level branch in the Afrasian tree. Evidence in this paper and in Bender (forthcoming) supports this grouping, although I would not go so far as to reintegrate Omotic as West Cushitic as Zaborski (1986) has done.

<sup>4</sup> By natural I mean a strong contrast in selection from the vowel set:

i	u
e	o
	a

This means low *a* with any other vowel or front *i*, *e* with low or back vowel. Since *a* tends to be phonologically closer to back than front, I consider *a* with *u*, *o* a bit less natural. Finally, *i* with *e* or *u* with *o* are the least contrasting pairs. Perhaps I should use Hock's term (1986:75) "polarizing" here for maximal contrasts, but I prefer to use "polar" for the "α-switch" phenomenon, e.g., *i/o* to *o/i* contrasts.

*sek-/yet-*. However, m. *g* or *k* is found in demonstratives in Ola Welaita and Gofa, 02 Gat'amé, 06 Bworo Agent, and 07 Nao; in 07 Sheko f. *k* is found. In pronoun forms, f. is marked by palatalization: *s/š* in 02 Zaysé, *z/ž* in 07 Dizi and Sheko. The -y- which occurs in a number of cases may be a transition vowel (e.g., *i + a* → *iya*).

To summarize: positing Proto-Cushomotic m. *kʷ/f. ti* leads to a reasonable explanation of the gender-marking systems of Omotic pronouns: typically m. non-palatal/f. palatal. In demonstrative elements, Greenberg (1960) posited a three-way system m. *n/f. t/pl. n*. For Cushitic *\*kuni/tini* is suggested (Hetzron 1980:18ff.). For Omotic, f. *n* with or without m. *k, g* is found in 01, 02, 04, 07. This could be an innovation; *a/e* is equally strong in Omotic (01, 02, 04 as *u/e*, 06 as *hi/lo*, 07). Gender marking in demonstrative has not been reported in 03, 08, 09.

## 2.2. GENDER IN NOUNS AND TERMINAL VOWELS

Several sources report special gender formatives for nouns—in all cases it seems to be a matter of sex gender, with m. usually being unmarked (see table 1 for these in 01a Welaita, Gofa, 02 Gat'amé, 04 Bensho, 05 Yemsa, 06 Bworo, Kefa, Mocha, 07 Dizi, 09 Hamer, Dimé). Hayward reports that only verb concord serves to distinguish gender in 02 Koré, and this also applies to masculine in Ola Gofa. Documentation on many languages is inadequate to establish gender in this way.

Following on Newman's suggestion (1980:19) that lexical gender persists even when lexical morphemes are replaced, I set out to search for traces of lexical gender in Omotic nouns. Most nouns in their elicited forms end in vowels (Hayward's TVs); we now know that TVs are all but totally lacking in 04 Gimira and also often are lacking in some Omoto languages (01, 02), Dizoid (07), and Aroid (09). Hayward (1987:227) states that Dizi has no TVs, but Allan (1976:380) says they may have m. /unmarked or f. suffixes (see table 1).

There are numerous problems in checking on TVs. For the most reliable and recent data, which were collected with the TV problem in mind (notably all that presented in Hayward 1987), we can be at ease, but for the rest, in varying degrees, we find items elicited by the same or different investigators having a choice of two or more TVs or sometimes no TV. The reasons for this can be:

Dialect differences;

Time differences (e.g., the changes in Dizi from Toselli 1939 to Allan 1976 or in Yemsa from Cerulli 1938 to Fissiha 1984);

Form that was elicited (nominative, accusative, or absolute, or something else—we are far from an understanding of case marking in Omotic, but see Zaborski 1984);

Errors in hearing or recording;

Form having a sex-gender suffix attached.

With all these cautions, I present in table 1 a count of TVs found with up to 119 nominals (nouns, adjectives, numerals). This covers all languages of the table except 02: Gat'amé (and Dorzé was substituted for Welaita; see note 3 to the table).

*2.2.1. Distribution of TVs.* As noted by Hayward (1987:221), Ometo (01 and 02) has a plausible protosystem of TVs consisting of *\*i, e, a, o*, with *\*i* being lost in favor of *\*a* in Welaita and Gofa, *\*e* in Koré, and  $\emptyset$  (no TV) in Zaysé. Malé has all four, Chara (based on Cerulli 1938) is uncertain, and Basketo has lost *\*e* and *\*o* (ibid:223). As already noted, Hayward states that 04 Gimira and 07 Dizi have no TVs at all.

My own survey largely agrees with this, but extends the range to all of Omotic; see table 1 and the summary in table 2. The four-vowel set is found throughout Ometo, although *i* is scarce, appearing significantly only in Malé (where it is the leader), Basketo, and Ganjulé (I also recorded a few instances of *i* in all others except Kullo). Kullo-Konta has moved to domination by *a*, and 03 Chara even more so (according to Fleming's data). In Bender 1975 (136–38) I suggested that 08 Mao seems lexically close to Ometo-Chara-Bensho-Anfillo. Here, we see that 08 has TVs *i, e, a* with *i* by far the most frequent in Hozo-Sezo and *e* in Bambeshi. I noted in an earlier study (Bender 1988, table 3) that final *-o, -u* are very rare in Hozo-Sezo (all lexicon, not just nominals) and *-u* in Bambeshi (ditto). Thus, Mao can be seen as going with Chara-Ometo, reinforcing the lexical finding. Aroid (09) also has *i* as leader (in Ari and Hamer), while in Dimé there is a spread across *e, o, u* and no TV.

Gimira (04) has diverged by dropping TVs and developing a tonal system having as many as six tones in the analysis of Wedekind (1985). This could easily have come out of an Ometo-Chara-like system, but so far the search for tone-TV correspondences has not met with success by either Wedekind or the present author.

This leaves 05, 06, and 07. All three are dominated by systems with *a, o, u*, and no TV (in addition, Dizi and Sheko have some *i*). In 06 Kefoid, unmarked TV has gone to *-o*, except for Bworo where *-a* corresponds to *-o*, but a significant number of *os* also occurs (given the generally poor sources and apparent great internal variation within Bworo, e.g., see Fleming 1976b:365ff., we cannot be sure of the significance of this). It is quite clear that *-e* marks sex-gender feminine in Kefa-Mocha; in Bworo *-u* or low tone marks feminine (Plazikowsky-Brauner 1950:66–67 for *-u*). In 05 Yemsa, Fissiha 1984 and I arrive at similar results with *-a* the leader (see note 5 to table 1). In Dizoid, no TV is commonest, but not universal in my data as Hayward found for his on Dizi.

2.2.2. *Feminine gender.* As noted earlier, sex-gender is indicated by *-e* in Kefa-Mocha, *-tu*, *-to*, *-ta* in Kullo-Konta, *-u* in Bworo, and so on. Thus, in Bworo (Plazikowsky-Brauner 1950:67) *bóllo* 'mule', *éno* 'old man', *mázu* 'woman', *énu* 'old woman'. In Kefa-Mocha *maace/meëccé* 'woman', *gidere/gidiire* 'young girl'.<sup>5</sup> For Kullo-Konta, see table 1, note 3.

In looking for non-sex-linked gender cases, I tried the items suggested by Newman (1980) as being f. in Proto-Afrasian. These are 'egg (?)', eye, fire, louse, sun'. None of these can be seen as promising except 'sun', which is f. in Mocha (according to Leslau 1959, but my own notes show m.) There is just a hint of more than expected frequency of TV *-e*. For example, in Kullo and Konta, which have shifted to *-a*, there are many cases of final *-ia*, *-ea*; does this mean the old TV is *-i* or *-e* and a new "absolutive" *-a* has been suffixed? Of those listed above, only 'eye' (Kullo-Konta *-ya*) and 'louse' (Konta *-ya*) show this.

My own further investigations led me to check on several additional items (including 'sun', already mentioned above, plus 'monkey' and 'moon', which Newman found to be m. in Afrasian). I also brought in Central (East in the usual terminology) Nilotic, where gender is similar to Cushitic. The languages used are Bari, Lotuxo, Masai, and Teso. Table 3 summarizes the findings.

The solidest evidence is provided by Kefa-Mocha and Kullo-Konta, where the elicited forms may include f. *-e* or *-tu*, *-to*, *-ta* respectively. One would like to go back now and check each of these, e.g., by asking Kullo speakers whether 'cat' is always *gabarato* (and also looking for verb concord) or how one would specifically refer to a male cat. The suspicious items seem to be from three semantic classes: body parts (said to be feminine in Cushitic, e.g., Hudson 1976:251), small animals (use of feminine as diminutive), and celestial phenomena (at least 'sun' and 'moon').

Of the many items that looked promising (chosen from a list of about 532), only the ten of table 3 were seen to be undeniably f. in at least one of Kefa-Mocha or Kullo-Konta. An examination shows that only 'sun' is predominantly f. in all families (of course only in Kefa-Mocha in Omotic), although 'cat' might turn out to be so also if I had the needed data. On the other hand, 'moon' is m. except in Beja, Afar, Kefa, and Lotuxo, and possibly in Ometo and Ari. Three animals ('cow, frog, goat') are potentially f. in Afrasian. However, 'cow' (better: "a head of cattle" to use a term that is unmarked in English) raises the problem of whether one has the unmarked term (if there is one) or a sex-gender term. In this case, it seems especially necessary to elicit a whole set of terms for young and old, male

<sup>5</sup> In all languages, 'woman, girl, sister, mother, hen' were found to be f. except Cushitic Dullay, which has 'hen', and 'cow' as m. (Amborn, Minker, and Sasse 1980:249, 254).

*Table 3*  
*Some gender-bearing nouns in Afrasian, Cushitic, Omotic, East Nilotic*

	<i>Cushitic</i>						
	<i>*Afrasian</i>	<i>Beja</i>	<i>Awngi</i>	<i>Afar</i>	<i>Somaloid</i>	<i>Dullay</i>	<i>Highland East</i> <i>*Cushitic</i>
Bee			±	f.		m.	±
Cat			±	f.	f.	f.	± f.
Cow (head of cattle)		m.	f.	m.	f.	pl. m.	f.? pl. m.
Frog			usu. f.	m.		f.	±
Goat		m./f. supplet.	±	f.	f.	f.	± f.
Maize				f.		f. loans: m., f.	2 words: m., f.
Monkey	*m.	m.	m.	m.	Rendille: m.		f.? m.
Moon	*m.	m.	f. month: m.	f.	m.	m.	m.
Mouse, rat			m.	m.	rat: m.	m.	± m.
Sun	*f.	f.	f.	f.	f.	2 words: m., f.	usu. f. f.

and female animals. ‘Frog’ could possibly be seen as a diminutive, but both ‘bee’ and ‘frog’ show mixed results.<sup>6</sup>

Incidentally, the reason for guessing at f. in 01 Ometo, 03 Chara, 06 Bworo, 07 Sheko, 09 Ari is the presence of uncharacteristic TVs, e.g., *-i* or *-e* in Ometo and Chara, *-i* in Bworo, *-e* in Sheko, *-n* rather than TV in Ari (recall that Ari has f. *-n*

<sup>6</sup> To show the disagreement of sources, let us look at just one: Cerulli (1951) on Kefa. In his section on gender and number of nouns (pp. 302–5) Cerulli specifically mentions the following as being ±, i.e., as taking *-o* for m., *-e* for f.: person, cat, fowl, rich person, old person, child, sibling. He also asserts that f. is used for diminutives and says that small animals are treated as f. (giving “*cinocefalo*,” not in my Italian dictionary, and frog as examples: *warigge* and *geppece* respectively, but in the vocabulary in the book, p. 546, he gives frog [It. *rana*] as *geppeco*). He criticizes the material of Reinisch (1888) as “uncertain” (p. 302). In the vocabulary, Cerulli’s assignments are as follows: bee m., cat m. (note ± above on p. 302), cow m. (noting on p. 302 that Reinisch gives ±), frog m., goat m., maize m., monkey sp. m., moon m., mouse m., sun m.

# GENDER IN OMOTIC

Table 3 (cont.)

	<i>Omotic</i>				<i>East Nilotic</i>
	<i>Kefa</i>	<i>Mocha</i>	<i>Kullo-Konta</i>	<i>Other</i>	
Bee	m.	f.		f. in 06 Bworo?; dim. -e in 07 Sheko	Teso f.; others (m.)
Cat	±	f.	f.	f. in 06 Bworo?; dim. -e in 07 Sheko	Teso m.; others (f.)
Cow (head of cattle)	±	±			Lotuxo u.; others (f.)
Frog	f. dim.	f.		f. in 03 Chara?	Masai m.; Bari common; Lotuxo, Teso f.
Goat	f.	u.			Bari, Masai f.; Lotuxo, Teso m.
Maize	f.	u.		f. in 06 Bworo?	Bari f.; others (m.)
Monkey	u.	f.			Teso m.; others (f.)
Moon	f. u.	f.	f. month: m.	f. in 01?; f. in 09 Ari?	Lotuxo f.; others (m.)
Mouse, rat	u.	f.	Konta f.?	f. in 09 Ari?	Teso m.; others (f.) Lotuxo dim. m.
Sun	f., u.	f., u.		m. f. in 09 Dimé	Lotuxo m.; others (f.)

Notes: Afrasian is from Newman (1980). Blank means unknown; ± means item can be marked as m. or f. by special morphemes; u. means unmarked; (m.) or (f.) means majority.

East Nilotic representatives are Bari (Spagnolo 1933), Masai (Tucker and Mpaayei 1955), Lotuxo (Muratori 1938), Teso (Hilders and Lawrance 1958).

See section 2.2.2 for discussion.

in other functions). Also note that the presence of *-ia*, *-ea*, *-oa*, *-ua* in Ometo, especially Kullo-Konta, could reflect older TVs now covered up by a later suffix *-a*, perhaps an absolutive, or perhaps a trend toward universal *-a* as in Chara.

The others are all mixed, though three of them ('monkey, moon, mouse') are m. in Cushitic, while f. in Omotic. 'Maize' is a relatively recent introduction to southwest Ethiopia (but see Tewolde 1984:191–92 for the possibility of pre-European contact introduction), and thus loanwords are often found. The inclusion

of East Nilotic is not very illuminating: of the ten items, five are predominantly f. in East Nilotic, three are predominantly m. and two are mixed. It could be that m. 'moon' /f. 'sun' as pan-East African (or even more widespread) as against the usual reverse marking in Indo-European is the only significant distribution.

Several other items of some interest are not presented in table 3. Among these, 'back' is intriguing in that it has TV *-e* in all of 01 and 02 except 01b Oyda *-o*, 01c Basketo *-a*. Could this be a remnant of f. for body parts in Cushomotic? (There seems to be a higher than expected incidence of *-i*, *-e* suffixes for other body parts in Omotic, but I hesitate to start a statistical investigation which would be fraught with all sorts of difficulties.) 'Turtle' shows a form *gegato* (~*gegia*) in Kullo; most likely this is a sex-gender feminine, but one would like to go back and check it (alongside 'cat', as mentioned above).

## 3

## Conclusions

In a search for evidence on gender in Omotic, I find it easier to raise questions than to answer them.

Where is gender marking found in Omotic? In 3d-person pronouns and verbal suffixes, perhaps a trace in 2d-person, in demonstratives, and in nouns as sex-gender markers (i.e., nouns are not inherently masculine or feminine except some that are marked as denoting persons or animals of f. gender—important exceptions to be noted below).

What are the exponents of gender in Omotic? The underlying distinction is that of m. nonpalatal/f. palatal, e.g., by vowels of form m. *o*/f. *e*, consonants of form *s*/*š*.

Specifically, what are the exponents of gender in Omotic nouns? Only in the Gonga or Kefoid Group do we find m. *-o*, f. *-e* (in Kefa-Mocha), and in Kullo-Konta of North Omoto, f. *-tu*, *-to*, *-ta* as clear indicators of sex gender. The situation for Bworo (also of Gonga) is unclear (Plazikowsky-Brauner gives m. *-o*, f. *-u*, but other sources do not support this). Given that f. *-n* occurs in the Dizoid and Aroid groups in other contexts, it is at least plausible that some cases of *-n* in nouns corresponding to Kefa-Mocha *-e* may indicate f.—similarly for *-i* in Bworo, *-e* in Sheko of the Dizoid family. It is better to consider non-f. as being u. (unmarked) rather than definitely m.

Are there nouns that are genuinely underlyingly gender-marked in Omotic? Yes and no. 'Moon' is f. in Kefa and Mocha, though some sources give it as u. in Kefa; 'sun' is given by different sources as both u. and f. in both Kefa and Mocha. Yet 'moon' is probably u. in Afrasian and predominantly so in East Nilotic, while 'sun' is probably f. in Afrasian and predominantly so in East Ni-

lotic. All the rest that show up as *f.* in Kefa-Mocha can be seen as likely diminutives (or in the case of 'cow', as one of several possibilities for varieties of cattle: bull, milk-cow, heifer, etc.).

Do the Omotic gender markers reflect \*Afrasian or possible \*Cushomotic originals? According to Hetzron (1980:18–21) Afrasian had *m. ku* and less surely *f. t*, while Cushitic had *m. ku*, *f. ti*. The Omotic gender exponents would follow very naturally from either of the above, and one cannot rule out a Cushomotic node in the Afrasian family tree.

What can we say about the distribution of terminal vowels in Omotic nominals? The similarity tree of table 2 summarizes the results: all five Omotic vowels (*i, u, e, o, a*) occur, as well as "no TV," although no group has all possibilities. Groups 01, 02, 03, 08, 09 have one to four of *i, e, a, o*; groups 05, 06, 07 have choices from *a, o, u*, and no TV; group 09 Dimé has *e, u*; group 04 has no TV at all. A quick look at Cushitic turns up:

Beja: sex-gender, nouns in *-i, e, a*, no TV occurs (Roper 1928);

Awngi: sex-gender, *f. -a, m. -i*, no TV (Hetzron 1978);

Afar: nouns ending in *-C#* or unstressed *-V#* are *m.*, those ending in stressed *-V#* are *f.*; all five Vs occur (Bliese 1981);

Somali: sex-gender, all five Vs and no TV occur (Abraham 1964);

Oromo: sex-gender, all five Vs occur (Gragg 1982);

Dullay: *m. -o, f. -e* (like Kefa-Mocha) (Amborn, Minker, and Sasse 1980);

Sidamo: sex-gender (*f. suf. -ta*, cf. Kullo-Konta), *-e, o, a* occur (Moreno 1940).

As can be seen, the situations in Cushitic and Omotic are similar: some groups have all five terminal vowels, some have restricted sets, some have no TV as a possibility, some have *m./f.* marking, and so on. It is not possible to say at this time whether or not this is all the result of convergence and influence (e.g., Kullo-Konta today is not far from Highland East Cushitic in which at least Kembata and Sidamo have *f. -ta*; Kefa-Mocha is separated from Dullay today by the entire Omoto complex). It strikes me as more plausible that all TVs go back to at least \*Cushomotic. If this is the case, then the similarity tree of table 2 can be viewed as having some possible genetic import. The loss of TVs in 04 is surely an innovation, but the split between those having *-i* and/or *-e* and those having no palatal TVs might be a result of any one of a number of combinations of retention and innovations. In Bender (forthcoming) it will be seen that the split largely agrees with some other significant splits. Hayward's argument that *-u* disappeared in some families because it served also as nominative marker is not very convincing in view of the facts that *-u* is a nominative ending only in 05 Yemsa and that both *-o* and *-u* are rare or absent in several families in all words, not just nouns.

The finding herein may reinforce the notion posed in Bender (forthcoming) that "Mao" languages have a special relationship to Chara-Ometo, that Aroid, though

distant, is also more closely related to Chara-Ometo than to other families, and that Yemsa and Bworo are closely related. Gimira and Dizoid show the strongest tendencies to drop TVs, but as always, it is a problem of whether this is because of genetic or areal relationships.

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## REVIEWS

VITALIJ V. SHEVOROSHKIN AND T. L. MARKEY, EDS. AND TRANS. *Typology Relationship and Time: A Collection of Papers on Language Change and Relationship by Soviet Linguists*. Ann Arbor: Karoma Publishers, 1986. 164 pp.

The editors make a revivalistic pitch for the Nostratic theory, saying that it is apt to prove itself as revolutionary as Sir William Jones's famous genetic-relationship discovery of two centuries ago that Greek, Latin, and Sanskrit were related. Nostratic allegedly relates most European and Asian languages, and some proponents even throw in various Amerindian and African languages to boot. Since not everyone accepts the Nostratic hypothesis, how unfair of Shevoroshkin and Markey to criticize (p. ix) scholars like Bernard Comrie (1981) who does not mention Nostratic in his *Language Universals and Linguistic Typology*, as well as Joseph H. Greenberg who "overlooked" and "ignored" Nostratic—they even call his work "biased" (p. ix). Bias is a double-edged sword, however, as will, I hope, become obvious in the following.

The Nostratic hypothesis was already much talked about by Holger Pedersen (1931; 1951) and others (e.g., A. Cuny 1912, 1924, 1931, 1943, 1946; H. Möller 1906, 1911); however, it was Vladislav Illič-Svityč (1934–1966; see 1963, 1967, 1971–84) and Aaron Dolgopolsky (now at the University of Haifa; see 1969, 1974) who began (independently) to assemble what they considered to be evidence of a macrofamily consisting of Indo-European, Afroasiatic, Ural-Altaic, Kartvelian (South Caucasian), Dravidian, and so on. Former students of both Illič-Svityč and Dolgopolsky are continuing to work on this in the Soviet Union, and most Western linguists are ignorant of Nostratic studies, we are told, because they do not read Russian, and further because Western scholarship has an "often even openly hostile, attitude toward any kind of broader language comparison" (pp. xiv–xv). This latter pronouncement is not true because Morris Swadesh, e.g., a Western linguist trained by Sapir, thought toward the end of his career that all languages were demonstrably genetically related. He used data such as English *horn* and Semitic *qarn* 'horn' and English *three* and Semitic *θalāθa* 'three' (see my review of his last book, *The Origin and Diversification of Language*; Kaye 1975). There are other American linguists (some of whom are basically specialists in Amerindian languages) who have followed Swadesh in trying to prove that all languages are related. This approach should be contrasted with that of the greatest Amerindianist of all time, Edward Sapir, undoubtedly also

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one of the greatest linguists ever produced in this country or abroad. In his famous (1921) *Science* paper, he recognized "six great groups, presumably genetic," and he was not afraid to state that some languages could not be placed into his groupings. We should not be afraid to admit that there are indeed such entities as language isolates.

Typical of the editors' reactions to the work of others are things like: (1) Joseph H. Greenberg "incorrectly included" (p. xlii), (2) "Both O. Sadowszki [*sic* instead of Sadowszky] and V. Ivanov have erroneously defined" (*ibid.*), and (3) a long strongly worded polemic against Allan Bomhard's (1984) *Toward Proto-Nostratic* (p. xxxii) part of which goes: "Now, let us discuss, however briefly, a recent work by Bomhard (1984), who, while oblivious of the background argumentation of and most of the literature on Nostratic, not to mention an apparently inadequate grounding in Indo-European studies, attempted to demonstrate a genetic relationship between Indo-European and Afro-Asiatic. (As an aside—and hardly to be construed as a gratuitous swipe—we are rather amazed that Bomhard's study was passed for publication: the review process, if there ever was one, could hardly have been very stringent.)," and (*ibid.*) "his comparisons here are, by whatever yardstick one cares to use, mostly wrong," and (p. xxxiv) "Bomhard's blunders both bolster Nostratic theory and reveal that the new (Gamkrelidze-Ivanov-Hopper) interpretation of Indo-European voiced stops is in need of remedial correction. But there are numerous other errors in Bomhard's study as well."

The bulk of the book reproduces translated articles by V. V. Ivanov (1980), A. Dolgopolsky (1964), two of Ivanov's reviews of Illič-Svityč's Nostratic comparative dictionary (1972 and 1977), and an article by B. A. Serebrennikov (1983), followed by a final one by T. Gamkrelidze and V. Ivanov (1980). Dolgopolsky's article has an introductory note (p. 27) written in 1983 stating that some of his proposed correspondences were now invalid, e.g., Indo-European \**duō* 'two' and Semitic \**θnj* 'two'; rather Dolgopolsky now believes that the Indo-European root is to be compared with Semitic \**tʔm* 'twin', an idea that is far-fetched to me. How can Hausa [bju] 'two' fit in here since Hausa is also supposedly Nostratic, or are we left to invoke Voltaire's famous maxim that the consonants count for very little and the vowels for even less?

I have already expressed my opinion concerning both the methodology for distant genetic comparisons, i.e., macrophyla, and the actual facts of Proto-Nostratic (Kaye 1985; 1989), so I shall not repeat those details here. The foreword to the Shevoroshkin-Markey book (written by both editors/translators) informs us (pp. vii–viii) that Markey "retains a somewhat more skeptical attitude than does Shevoroshkin to what James A. Matisoff (p.c.) has called 'megalo-comparisons'." I remain much more than skeptical; I am totally unconvinced that many of these comparisons can even be taken seriously let alone deserve much scholarly discussion in our learned journals. No linguist can prove that languages are unrelated, of

course, but contemporary linguistic methodology as practiced by Soviet and other linguists has not proven that all these languages are, in fact, related into a Nostratic or any other (super)phylum. (Imagine, too, that there still are a few linguistic monogeneticists out there in 1988 who are reconstructing \*Proto-Human or \*Proto-World! This just cannot be done, and is it not about time that someone just come right out and said so?) L. Bloomfield's *Language* said it all, I think, when he warned how easy it would be to compare Malay *mata* 'eye' with Modern Greek *mati* 'eye' if one did not know something about the history and development of those two distinct languages and their respective language families (Bloomfield 1933:297). He further states (ibid.): "Many features that are not widespread . . . are found in distant and wholly unrelated languages." And (ibid.): "Other resemblances between languages bear no significance whatever."

To finish off the comparativists, or better put comparativomaniacs, who believe that the Malay and Greek words cited above can be used for a Proto-Nostratic or whatever proposed genetic family or phylum, Bloomfield (ibid.) had the following to say (which really sums up the limits of the comparative method as we have it and as we can properly utilize it): "Even if, against all present seeming, it should turn out, some day, that these two languages are related, the relationship would lie far back of Primitive Indo-European and Primitive Malayo-Polynesian time, and the resemblance of the modern words for 'eye' would have nothing to do with this relationship." After all, as is well known, even Persian *bæd* 'bad' is not cognate with English *bad* [bæd], and both Persian and English are, in fact, Indo-European languages.

If Proto-Dravidian \**nām* 'we' is cognate with Afroasiatic \**naḥnu* 'we' (as posited by the editors, p. xx),<sup>1</sup> then this will eventually become standard dogma in genetic linguistics. If it is not or if contemporary methodology will not allow one to say this with any degree of certainty,<sup>2</sup> the Nostraticists and linguistic monoge-

<sup>1</sup> I have hard it proclaimed at various conferences over the years that some linguists have connected the Proto-Algonquian first-person \**ne*- and second-person \**ke*- with Afroasiatic forms (cf. Arabic [*naḵtubu* 'we write' and *baytu[ka]* 'your [m.sg.] house' and *baytu[ki]* 'your [f.sg.] house'). There have been, of course, many attempts at relating various Amerindian and Semitic languages (the lost tribe of Israel and all that, I suppose). The introduction to Arnold C. M. Leesberg's *Comparative Philology* (1903:1-4) gives a partial glimpse of this earlier work. The almost one hundred pages of alleged cognates between Semitic and various Amerindian languages produce many questionable errors in the citation of the Semitic data. Not being an Americanist, I cannot vouch for the accuracy of the Amerindian data. As illustrative of the proposed cognates, Hebrew *ʔem* and Aramaic *ʔimmā* are compared with Aymara *mamatay*, Quechua *mama*, Tzotzil *naa* or *me*, Taino *mama*, etc. See my comments on these types of data (Kaye 1985:888) which many have used (particularly the word for 'father'), for which R. Jakobson had already provided a convincing universal explanation in 1960 (see Jakobson 1960).

<sup>2</sup> I am, of course, not the first Semitologist to criticize the attempts by other scholars to relate Semitic (and consequently Afroasiatic as a whole) to other language families. Others such as R. Hetzron (1977) and J. Malone (1973a, 1973b), to mention but two, have examined both the methodological and language-specific concerns (and pitfalls) in their reviews of such attempts, and they have concluded, and with good reason, in the

netecists who reconstruct \*Proto-World will continue to assert that it is their opponents who are the "Flat-Earth Society," refusing to accept the obvious (and overwhelming) "God's truth!" As is well known, what is "God's truth" for one linguist is just hocus-pocus for another.<sup>3</sup> As for me, I prefer to remain uninformed about ongoing progress in Soviet or Western Nostratic theory (and about Barry Fells's Pima-Arabic genetic connection as published in his journal, *Epigraphic Society Occasional Publications*, and other such theories). After all, linguists cannot know everything and ignorance is supposed to be bliss. It is not unreasonable to sum up my estimation of *Typology Relationship and Time* by comparing Shevoroshkin's and Markey's conclusion about Bomhard (1984) cited earlier in my remarks and in the following (p. 25): "flawed by too many implausible or simply incorrect comparisons." Now I ask the reader to judge: where is the bias?

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negative. Malone (1973a) in some ways reverses the conclusion he expressed in Malone (1973b), whereas Hetzron (1977:353) has demonstrated the dangers of trying to relate Hungarian *kettő* 'two' to Soddo (a Gurage language = Ethio-Semitic) *kitt* 'two'. There are also people who look alike without having a common ancestor (or, at least, a common ancestor to whom we can scientifically point).

<sup>3</sup> I would not put scholars such as Joseph H. Greenberg (1987) in this category, although his *Language in the Americas* tries to make a case for the genetic unity "Amerind" for all the autochthonous Amerindian languages except Na-Dene and Eskimo-Aleutian. Even Lyle Campbell's negative review of Greenberg's book does not confuse Greenberg's "well-deserved eminence" (Campbell 1988:591) in the field of diachronic linguistics with what he refers to as the more (ibid.:608) "marginal proposals" of half a dozen or so linguists in their attempts at relating many different language families. To me it is highly significant that Greenberg's (1987) Euroasiatic group does not include Afroasiatic. According to him, Afroasiatic is not related to any of his other fourteen families.

It is surprising indeed to see that Greenberg has used onomatopoeic forms as support for his hypothesis of a Proto-Amerind. Campbell assembles evidence from Finnish (1988:607-8) demonstrating that Greenberg's proposals are no better than comparison with a language chosen at random. I believe Campbell's observations on distant genetic relationships coincide nicely with my own. Surely he is right that *ma* as a negative morpheme is "accidentally similar" (ibid.:602) in Afroasiatic, Mayan, Sino-Tibetan, Thai, Indo-European, Algonquian, etc.

## REVIEW

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ARIEL A. BLOCH, *Studies in Arabic Syntax and Semantics*, Wiesbaden: Otto Harrassowitz, 1986. xxi + 140 pp.

This is an excellent set of connected essays on aspects of the syntax and semantics of Classical and Modern Standard Arabic. The five chapters deal with Arabic synchronically and diachronically. The first two, "A Principle of Balancing" and "Direct and Indirect Relative Clauses," are descriptive. "Balancing" is the reduplication of an affixed pronoun with the corresponding independent pronoun, as in *ṭarak-tu ʔanā* 'left-I I', and *baytu-ka ʔanta* 'house-you you'. It is obligatory in case of coordination or apposition, where it is semantically neutral, as in *ʔakal-tu ʔanā wa-Zaydun* 'I ate I and-Zayd', 'I ate and Zayd ate'. It is semantically neutral in this coordinating construction since the sentence without the reduplicated pronoun would be ungrammatical: \**ʔakal-tu wa Zaydun*. It is obligatory because the suffixed pronoun is not syntactically on a par with the following free form and needs to be given "syntactic parity" (p. 8) with that free form; hence the term "balancing," which is optional in case of stress or focus, as in *ʔakal-tu anā* 'ate -I I', 'I ate'. Here the optional repetition of the pronoun gives it added attention, providing focus.

Chapter 2 is an absorbing study of the question, does one say for, e.g., "You who say" *ʔantum allaḏīna taqūlūna* or *ʔantum allaḏīna yaqūlūna*? The first phrase, where the verb in the relative clause agrees in person with the antecedent pronoun, Bloch calls a direct relative clause; the second one, where the embedded verb is in the third rather than the second person, is an indirect relative clause. He then proceeds to demonstrate that there is a series of correspondences between this feature of directness and several semantic features: directness correlates with specific, unitary, and real-life referents, whereas indirect relative clauses show the features of category or genus and metaphoric application. The following Middle Arabic example, with Christ as the speaker, illustrates both meanings: *ʔanā lxubzu lḥayyu llaḏī nazaltu minna ssama man ʔakala minhu lā yamūt* 'I am the living bread that came down from Heaven. Anyone who eats of it shall not die' (p. 36).

First person agreement of *nazaltu* in the first (direct) relative clause shows that the speaker is referring to a specific person—Himself. The indirect relative clause in the second sentence, with third person *minhu*, provides a general, abstract, metaphorical sense. Bloch considers other relevant features such as the degree of specificity of *man* versus *allaḏī*, the semantic feature of emphasis, its occurrence in vocative constructions, and its distribution in the modern dialects, and makes a convincing case for his analysis.

Chapter 3, "'Be With' > 'Encounter,' 'Come With' > 'Bring'" traces the development of the force of the preposition *bi-* to that of a verb in the two cases mentioned in the title of the chapter. With *ʔidā* 'suddenly there was', as in *ʔidā bi-Zaydin* 'Sud-

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denly there was Zayd', this meaning of proximity—'at, near, with'—developed into the meaning of 'to encounter, perceive (a person or thing)', as in *ʔidā huwa bi-Zaydin* 'All of a sudden he encountered Zayd'. With a verb of motion *bi-* came to introduce a direct object with an implied verb of bringing or obtaining, as in *jāʔa bi-Zaydin* 'He brought Zayd'.<sup>1</sup> This development of verbless objects is paralleled by the occurrence of semantic objects after prepositional phrases with *li-* and *ʕalā* as in *fakayfa lī bihādā lmāli* 'How can I get hold of this money?' (p. 47), *ʕalayya bihi* 'Bring him to me!' (p. 48). The essential feature in all this is the notion of movement. Since these sentences are for the most part verbless, Bloch emphasizes the point that relational ("case") roles can be meaningfully used in the description of a large variety of sentence types.

Chapter 4, "Presentational Structures and Their Syntactic and Semantic Development," deals with sentences that start with a deictic particle or pronoun, e.g., *ʔidā* 'behold!', *hādā* 'here is / there is', serving to draw the hearer's attention to something: *hādā Zaydun* 'Here is Zayd' (p. 55).<sup>2</sup> This Bloch calls the nuclear presentative sentence since it consists only of a presentative word and a noun. It was the original presentative construction in Arabic; it was expanded upon, typically by a *ḥāl* construction, as in

*hādā Zaydun munṭaliqan* (acc.) 'There is Zayd, departing'

where the *ḥāl* participle *munṭaliqan* is in the accusative case and forms a single noun phrase with *Zaydun*. In this amplified presentative sentence the presentative is still a part of the sentence and *Zayd munṭaliqan* is a single phrase constituting the second part of the sentence.

The amplified presentative sentence type then underwent syntactic reanalysis whereby the *ḥāl* is reanalyzed as a nominative predicate, with the noun as its subject, and the presentative word has become a deictic particle outside the syntax of the sentence, giving rise to the proclitic presentative sentence:

*hādā Zaydun munṭaliqun* (nom.) 'Look, Zayd is departing'.

The historical account of this development is accompanied by a wealth of detailed illustrative material involving not only considerations of semantics and syntax of medieval and Modern Standard Arabic usage but also of Koranic and dialectal in addition to Hebrew usage.

In the final chapter, "The Historical Syntax and Semantics of *ʔinna*," Bloch argues that the particle *ʔinna* developed along lines parallel to those of the presentative structures: the primitive nuclear construction consisted of *ʔinna* in its original presentative

<sup>1</sup> The development of *jāʔa bi-* into the verb *jāb*, *yjīb* in dialectal Arabic reinforces the interpretation of the object of *bi-* as the object of the verb.

<sup>2</sup> This is different from an equational sentence, e.g., 'This is Zayd', in that, unlike an equational sentence, it cannot take a *ḍamīr faʕlī*, as in *hādā huwa Zaydun* 'This is Zayd' (p. 57).

sense—"there is," "here is"—plus a substantive, as in the following exchange: *hal lakum ʔaḥadun?* 'Do you (pl.) have anyone to stand by you?' (p. 113); answer *ʔinna Zaydan wa ʔinna ʔAmran* 'There is Zayd and there is Amran' (p. 114). In this rare early usage the original alerting sense is preserved; later *ʔinna* acquired an emphasis meaning as well, translatable by "surely," "indeed," etc., which eventually became the sole meaning of the particle. On comparative and historical grounds an unattested amplified stage can be posited where the substantive receives a modifier such as a *ḥāl*, as in the hypothetical sentence

\**ʔinna* <sup>┌────────┐</sup>*Zaydan munṭaliqan* (p. 128)

which presumably would be translated "Indeed there is Zayd, as he departs." This amplified structure then underwent syntactic reanalysis to yield the familiar construction

*ʔinna* <sup>┌────────┐</sup>*Zaydan munṭaliqan* (p. 128)

which means 'Indeed, Zayd is departing'. While this reconstruction is sound on the basis of historical / comparative method alone, it is corroborated by observed linguistic data, that is, citations from contemporary bedouin usage. Bloch cites, among others, the following ʔAnaze (Syrian) example: *wʔana wəlbunayya ʃaʃadna ʃaljabal waʃalna larās marqab wənn nabʃ əlmâ?* 'And I and the girl went up to the mountain. We reached a high elevation, and there was the source of water' (p. 133). As Bloch points out, such evidence not only confirms the historical method but also points out again that the modern Arabic dialects often preserve ancient Semitic features that have been lost or are only vestigial in Classical Arabic.

This is an extremely well researched and well reasoned set of studies; the argumentation is convincingly bolstered by many citations from a variety of Arabic sources—Koranic, Classical, Modern Standard, and the dialects—as well as from cognate languages. Issues are treated comprehensively, always taking into account the writings of the medieval Arab grammarians. A particular strength in the methodology is the care with which Bloch first draws conclusions based on formal criteria and then proceeds to draw additional conclusions on the basis of contextual and semantic features. It is a valuable addition to the libraries of Arabists, Semitists, and general linguists interested either in Arabic / Semitic syntax and semantics or in the application of the historical method in linguistics.

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